Journal of Food Science
Author Index, Volume 58, 1993

A

Aaron, D.K., 1231
Abdollahi, A., 663
Abdullah, A., 120
Abouzied, M.M., 1258
Adda, J., 1005
Addo, K., 583
Ahn, D.U., 43, 278, 283, 288
Ajuyah, A.O., 43, 270, 278
Akinwunmi, I., 242
Almonacid-Merino, S.F., 914
Amiot, M.J., 351, 840
An, H., 1050
Andersen, M.K., 461
Ang, C.Y.W., 265
Antoniazzi, F., 1286
Areas, J.A.G., 378
Arihara, K., 38
Arnold, R.N., 28
Arora, A., 335
Arp, S.C., 28
Arteaga, G.E., 656, 1152
Arul, J. 182, 1365
Aselage, J.M., 631
Ashman, R.B., 342
Asmussen, J., 1157
Aubert, S., 351, 840
Avena-Bustillos, R.J., 899, 904

B

Babbitt, J.K. 62, 96
Baberian, R., 1099
Babic, I., 351, 840
Baek, H.H., 525
Baker, R.A., 1107
Bakhit, R., 1162
Bakir, H.M., 90
Balaban, M.O., 1129
Ball, H.R. Jr., 1013, 1017
Ballesteros, S.A., 435
Balley, M.E., 973
Barbieri, G., 968
Barbosa-Canovas, G.V., 797, 1030,1118
Barbut, S., 867
Barefoot, S.F., 544, 623
Barletta, B.J., 1030
Baron, R.F., 138
Barrett, D.M., 399
Bartach, J.A., 764
Barth, M.M., 140, 1070
Bassal, A., 449
Bastrash, S., 338
Bates, R.P., 193
Bauer, D.L., 314
Beaudry, E.G., 633
Bechtel, P.J., 482
Beelman, R.B., 331
Bej, A.K., 1191
Belden, R.P., 731
Belcia, A., 375
Ben-Arie, R., 1397
Bendito De Barber, C., 419
Benway, D.A., 605
Bernal, M.A., 611
Berry, B.W., 34
Berry, R.E., (6)iv, 1179
Bertone, R.A., 821
Bett, K.L., 1294
Beuchat, L.R., 120, 1318
Bezard, J., 1303
Bhaskar, A.R., 748, 996
Bhirud, P.R., 1090, 1095
Bidner, T.D., 697
Bishop, D.J., 484
Blaauschek, H.P., 239
Black, R.G., 848
Blackmer, D.S., 691
Blanc, P.J., 1099
Blanchard, S.P., 164, 720
Bock, M.A., 332
Bodyfelt, F.W., 1307
Bolchi, A., 237
Boles, J.A., 1254
Bolin, H.R., 347
Bolroni, L., 968
Booren, A.M., 1258
Bornstein, B.L., 595
Borrago, F., 589, 592
Bouillanne, C., 153
Bouzas, J., 104, 1307
Bowers, J.A., 501
Boyacioglu, D., 416
Boyd, G., 717
Boyle, E.A., 1231
Boyle, E.A.E., 959
Boyle, P.K., 592, 599
Boyles, M.J., 1135
Bozzini, J.P., 435
Bradford, D.D., 488, 1245
Brake, N.C., 1422
Bramlage, W.J., 925
Brandenburg, A.H., 1086
Bravo, L., 642
Brenes, M., 347
Brewer, M.S., 482, 1219
Brewer, M.S., 978
Brochetti, D., 505
Broussard, S., 1070
Brtacchi, P.G., 237
Bugran, S., 497
Buhri, A.B., 1145
Burton, D., 583
Burton, H.R., 583
Busboom, J.R., 497
Bush, R.K., 385

C

Cadwallader, K.R., 525, 1203
Cai, W., 872
Calderon, A.A., 611
Calkins, C.R., 691
Camire, M.E., 335
Canales, I., 589, 592
Canellas, J., 805
Cannon, J.E., 1249
Carballo, J., 1269
Cardozo, M.S., 929
Careche, M., 1269
Careri, M., 968
Carpenter, C.E., 939
Carpenter, J.A., 473, 531
Carr, T.R., 950, 963, 978, 1249
Carragher, J.F., 770
Cassens, R.G., 38, 701
Castaigne, F., 182, 338
Casterline, J.L. Jr., 365
Cavalieri, R.P., 797, 1118
Cervero, M-C., 724
Cha, Y.J., 525
Chambers, E. IV, 508
Champagne, C.P., 981
Chan, J.K., 1057
Chan, K.M., 1
Chandra, S., 1375
Chapman, K.W., 1208
Charter, E.A., 1282
Chassy, B.M., 863
Chen, H., 817
Chen, J.S., 535
Chen, S.-D., 1157
Chiang, B.H., 303
Chin, H.-W., 835
Chiou, R.G., 1103
Chipman, J.K., 1216
Chirife, J., 435
Chism, G.W., 430
Chung, H.Y., 1203
Chung, O.K., 845
Chung, Y.C., 1055
Cifuentes, A., 774
Cimino, G., 1286
Claassen, M.R., 108
Clarke, A.D., 973
Claus, J.R., 259
Clavatta, M.L., 1286
Cofrades, S., 656, 1269
Collar, C., 1324
Collins, J.L., 856
Colmenero, F.J., 1269
Conrad, K.M., 1013, 1017
Contard, N., 206
Cooke, M.A., 1216
Cooksey, K., 5, 239
Cooley, H.J., 173, 876
Cordle, C.T., 544
Cornforth, D.P., 51
Coutaz, V.R., 821
Craig, J.A., 501
Crapo, C., 535
Creamer, L.K., 299
Criddle, R.S., 1411
Criswell, L.G., 544
Crum, A.D., 233
Cuq, J-L., 206
Czarnecki, Z., 395, 1404

D

D'Amour, J., 182
D'Appolonia, B.L., 416
Das, K.P., 439
Das, N.P., 318
Daun, H., 1068
David, D.R., 614
Davies, J.E., 1216
Davis, C.E., 710
Davis, T.R., 599
Dawkins, N.L., 562
Dawley, R.M., 609
Day, G.A., 1103
DeBeufort, F., 436
DeCastro, A., 842
Decker, E.A., 1, 233, 1241
Delaquis, P.J., 981
Desmazeaud, M.J., 153
Desrosiers, T., 756
Dickinson, E., 295
Diepenmaat, H.B., 1349
Dionysius, D.A., 780
Diosady, L.L., 872
Doi, E., 229
Dondero, M., 104, 774
Dorko, C.L., 574, 579
Du, Z., 925
Duizer, L.M., 943
Dungan, S.R., 1148
Duran, L., 1125
Duran, M.C., 347
Durst, R.W., 399, 633
Dussault, F., 981
Dyer-Hurdon, J.N., 1277

E

Edwards, C.G., 453
Egana, W., 774
Egbert, W.R., 488, 1245
Ehlermann, D., (3)iv
Eilert, S.J., 691, 948
Einhorn, J., 1005
Erickson, M.C. 75, 84
Eshtiaghi, M.N., 1371
Eun, J-B., 71
Exama, A., 1365

F

Fabre, C.E., 1099
Farah, A., 627
Farkye, N.Y., 1300
Faustman, C., 1273
Fedler, C.A., 480
Fennema, O.R., 1422
Fenton, T.W., 270
Fernandez-Espla, M.D., 1262
Fichtali, J., 1282
Fiddler, W., 62
Field, R.A., 497
Figueras, E., 134
Findlay, C.J., 943
Fishman, M.L., 680
Fiszman, S.M., 1125
Fleming, H.P., 325, 813, 832
Floros, J.D., 1381
Flurkey, W.H., 609
Foegeding, E.A., 727, 867, 983,1040
Fontaine, J., 981
Fontana, A., 1286
Fontana, A.J., 1411
Francis, F.J., 1068
Froning, G., 1017
Fujimoto, K., 66
Fujio, Y., 1026
Fukazawa, C., 1198

G

Gamero, M., 1125
Garcia Zepeda, C.M., 53
Garcia, P., 347
Garrido, A., 347
Garrido, V.M., 193
Garrote, R.L., 821
Garwin, J.L., 663
Gates, K.W., 314, 519
Gates, R.A., 62
Gbur, E.E., 631, 1132
Geiger, P.J., 890
Gekas, V., 827
Gelroth, J.A., 1176
Gennadios, A., 212
Genovesse, M.I., 148
German, J.B., 1148
Gervais, P., 1346
Ghorpade, V.M., 51
Giampaoli, P., 586
Giddings, J.C., 1166
Gill, T.A., 1057
Glaser, B.K., 1176
Gloukas, J.G., 705
Godber, J.S., 99, 697
Goedeken, D.L., 1329
Gokalp, H.Y., 492
Goma, G., 1099
Gomez, M.H., 199
Goni, I., 642
Gonzalez, A.R., 631
Gosselin, C., 182
Graham, H.D., 439
Gratzek, J.P., 908
Gregg, L.L., 259
Gregory, J.F. III, (5)ii, 801
Griffin, L.E., 1065
Grimm, C.C., 1294
Gripon, J.C., 1005
Guilbert, S., 206
Guillou, A.A., 1381
Gujska, E., 395, 1404
Gullett, E.A., 943
Guraya, H.S., 888

H

Habig McHugh, T., 899
Hackney, C.R., 259
Hale, M., 62
Hall, G.M., 1021
Hamada, S., 739
Han, D., 697
Han, I.Y., 544

Journal of Food Science
Author Index, Volume 58, 1993

A

Aaron, D.K., 1231
Abdollahi, A., 663
Abdullah, A., 120
Abouzied, M.M., 1258
Adda, J., 1005
Addo, K., 583
Ahn, D.U., 43, 278, 283, 288
Ajuyah, A.O., 43, 270, 278
Akinwunmi, I., 242
Almonacid-Merino, S.F., 914
Amiot, M.J., 351, 840
An, H., 1050
Andersen, M.K., 461
Ang, C.Y.W., 265
Antoniazzi, F., 1286
Areas, J.A.G., 378
Arihara, K., 38
Arnold, R.N., 28
Arora, A., 335
Arp, S.C., 28
Arteaga, G.E., 656, 1152
Arul, J. 182, 1365
Aselage, J.M., 631
Ashman, R.B., 342
Asmussen, J., 1157
Aubert, S., 351, 840
Avena-Bustillos, R.J., 899, 904

B

Babbitt, J.K. 62, 96
Baberian, R., 1099
Babic, I., 351, 840
Baek, H.H., 525
Baker, R.A., 1107
Bakhit, R., 1162
Bakir, H.M., 90
Balaban, M.O., 1129
Ball, H.R. Jr., 1013, 1017
Ballesteros, S.A., 435
Balley, M.E., 973
Barbieri, G., 968
Barbosa-Canovas, G.V., 797, 1030,1118
Barbut, S., 867
Barefoot, S.F., 544, 623
Barletta, B.J., 1030
Baron, R.F., 138
Barrett, D.M., 399
Bartach, J.A., 764
Barth, M.M., 140, 1070
Bassal, A., 449
Bastrash, S., 338
Bates, R.P., 193
Bauer, D.L., 314
Beaudry, E.G., 633
Bechtel, P.J., 482
Beelman, R.B., 331
Bej, A.K., 1191
Belden, R.P., 731
Belcia, A., 375
Ben-Arie, R., 1397
Bendito De Barber, C., 419
Benway, D.A., 605
Bernal, M.A., 611
Berry, B.W., 34
Berry, R.E., (6)iv, 1179
Bertone, R.A., 821
Bett, K.L., 1294
Beuchat, L.R., 120, 1318
Bezard, J., 1303
Bhaskar, A.R., 748, 996
Bhirud, P.R., 1090, 1095
Bidner, T.D., 697
Bishop, D.J., 484
Blaauschek, H.P., 239
Black, R.G., 848
Blackmer, D.S., 691
Blanc, P.J., 1099
Blanchard, S.P., 164, 720
Bock, M.A., 332
Bodyfelt, F.W., 1307
Bolchi, A., 237
Boles, J.A., 1254
Bolin, H.R., 347
Bolroni, L., 968
Booren, A.M., 1258
Bornstein, B.L., 595
Borrago, F., 589, 592
Bouillanne, C., 153
Bouzas, J., 104, 1307
Bowers, J.A., 501
Boyacioglu, D., 416
Boyd, G., 717
Boyle, E.A., 1231
Boyle, E.A.E., 959
Boyle, P.K., 592, 599
Boyles, M.J., 1135
Bozzini, J.P., 435
Bradford, D.D., 488, 1245
Brake, N.C., 1422
Bramlage, W.J., 925
Brandenburg, A.H., 1086
Bravo, L., 642
Brenes, M., 347
Brewer, M.S., 482, 1219
Brewer, M.S., 978
Brochetti, D., 505
Broussard, S., 1070
Brtacchi, P.G., 237
Bugran, S., 497
Buhri, A.B., 1145
Burton, D., 583
Burton, H.R., 583
Busboom, J.R., 497
Bush, R.K., 385

C

Cadwallader, K.R., 525, 1203
Cai, W., 872
Calderon, A.A., 611
Calkins, C.R., 691
Camire, M.E., 335
Canales, I., 589, 592
Canellas, J., 805
Cannon, J.E., 1249
Carballo, J., 1269
Cardozo, M.S., 929
Careche, M., 1269
Careri, M., 968
Carpenter, C.E., 939
Carpenter, J.A., 473, 531
Carr, T.R., 950, 963, 978, 1249
Carragher, J.F., 770
Cassens, R.G., 38, 701
Castaigne, F., 182, 338
Casterline, J.L. Jr., 365
Cavalieri, R.P., 797, 1118
Cervero, M-C., 724
Cha, Y.J., 525
Chambers, E. IV, 508
Champagne, C.P., 981
Chan, J.K., 1057
Chan, K.M., 1
Chandra, S., 1375
Chapman, K.W., 1208
Charter, E.A., 1282
Chassy, B.M., 863
Chen, H., 817
Chen, J.S., 535
Chen, S.-D., 1157
Chiang, B.H., 303
Chin, H.-W., 835
Chiou, R.G., 1103
Chipman, J.K., 1216
Chirife, J., 435
Chism, G.W., 430
Chung, H.Y., 1203
Chung, O.K., 845
Chung, Y.C., 1055
Cifuentes, A., 774
Cimino, G., 1286
Claassen, M.R., 108
Clarke, A.D., 973
Claus, J.R., 259
Clavatta, M.L., 1286
Cofrades, S., 656, 1269
Collar, C., 1324
Collins, J.L., 856
Colmenero, F.J., 1269
Conrad, K.M., 1013, 1017
Contard, N., 206
Cooke, M.A., 1216
Cooksey, K., 5, 239
Cooley, H.J., 173, 876
Cordle, C.T., 544
Cornforth, D.P., 51
Coutaz, V.R., 821
Craig, J.A., 501
Crapo, C., 535
Creamer, L.K., 299
Criddle, R.S., 1411
Criswell, L.G., 544
Crum, A.D., 233
Cuq, J-L., 206
Czarnecki, Z., 395, 1404

D

D'Amour, J., 182
D'Appolonia, B.L., 416
Das, K.P., 439
Das, N.P., 318
Daun, H., 1068
David, D.R., 614
Davies, J.E., 1216
Davis, C.E., 710
Davis, T.R., 599
Dawkins, N.L., 562
Dawley, R.M., 609
Day, G.A., 1103
DeBeufort, F., 436
DeCastro, A., 842
Decker, E.A., 1, 233, 1241
Delaquis, P.J., 981
Desmazeaud, M.J., 153
Desrosiers, T., 756
Dickinson, E., 295
Diepenmaat, H.B., 1349
Dionysius, D.A., 780
Diosady, L.L., 872
Doi, E., 229
Dondero, M., 104, 774
Dorko, C.L., 574, 579
Du, Z., 925
Duizer, L.M., 943
Dungan, S.R., 1148
Duran, L., 1125
Duran, M.C., 347
Durst, R.W., 399, 633
Dussault, F., 981
Dyer-Hurdon, J.N., 1277

E

Edwards, C.G., 453
Egana, W., 774
Egbert, W.R., 488, 1245
Ehlermann, D., (3)iv
Eilert, S.J., 691, 948
Einhorn, J., 1005
Erickson, M.C. 75, 84
Eshtiaghi, M.N., 1371
Eun, J-B., 71
Exama, A., 1365

F

Fabre, C.E., 1099
Farah, A., 627
Farkye, N.Y., 1300
Faustman, C., 1273
Fedler, C.A., 480
Fennema, O.R., 1422
Fenton, T.W., 270
Fernandez-Espla, M.D., 1262
Fichtali, J., 1282
Fiddler, W., 62
Field, R.A., 497
Figueras, E., 134
Findlay, C.J., 943
Fishman, M.L., 680
Fiszman, S.M., 1125
Fleming, H.P., 325, 813, 832
Floros, J.D., 1381
Flurkey, W.H., 609
Foegeding, E.A., 727, 867, 983,1040
Fontaine, J., 981
Fontana, A., 1286
Fontana, A.J., 1411
Francis, F.J., 1068
Froning, G., 1017
Fujimoto, K., 66
Fujio, Y., 1026
Fukazawa, C., 1198

G

Gamero, M., 1125
Garcia Zepeda, C.M., 53
Garcia, P., 347
Garrido, A., 347
Garrido, V.M., 193
Garrote, R.L., 821
Garwin, J.L., 663
Gates, K.W., 314, 519
Gates, R.A., 62
Gbur, E.E., 631, 1132
Geiger, P.J., 890
Gekas, V., 827
Gelroth, J.A., 1176
Gennadios, A., 212
Genovesse, M.I., 148
German, J.B., 1148
Gervais, P., 1346
Ghorpade, V.M., 51
Giampaoli, P., 586
Giddings, J.C., 1166
Gill, T.A., 1057
Glaser, B.K., 1176
Gloukas, J.G., 705
Godber, J.S., 99, 697
Goedeken, D.L., 1329
Gokalp, H.Y., 492
Goma, G., 1099
Gomez, M.H., 199
Goni, I., 642
Gonzalez, A.R., 631
Gosselin, C., 182
Graham, H.D., 439
Gratzek, J.P., 908
Gregg, L.L., 259
Gregory, J.F. III, (5)ii, 801
Griffin, L.E., 1065
Grimm, C.C., 1294
Gripon, J.C., 1005
Guilbert, S., 206
Guillou, A.A., 1381
Gujska, E., 395, 1404
Gullett, E.A., 943
Guraya, H.S., 888

H

Habig McHugh, T., 899
Hackney, C.R., 259
Hale, M., 62
Hall, G.M., 1021
Hamada, S., 739
Han, D., 697
Han, I.Y., 544

Han, S., 413
Hansen, L.D., 1411
Haraguchi, Y., 619
Hardin, R.T., 43, 270
Harnsawas, S., 1265
Harper, S.J., 893
Harrison, M.A., 519
Hart, L.T., 697
Hattori, M., 734
Hattula, T., 1212
Hayakawa, I., 1026
Hayakawa, K., 884, 1335, 1340
Hayashiu, M., 753
Heaney, R.P., 1378, 1401
Heatherbell, D.A., 190
Hedrick, H.B., 973
Hemmen, F., 1291
Henderson, J.M., 1172
Herian, A.M., 385
Hermus, R.J.J., 1349
Hettiarachchy, N.S., 416
Hidalgo, F.J., 667
Hildebrand, D.F., 583
Hinders, S.M., 1378, 1401
Hiraoka, J., 739
Hoagland, P.D., 680
Hoek, K.S., 780
Honarmand, F., 614
Hoppner, K., 1084
Horikoshi, T., 739
Howard, L., 1411
Howard, L.R., 1065
Hsieh, Y.L., 116, 1001
Hsu, C.K., 1055
Huang, C-C., 249
Huang, V.T., 186
Huang, Y.W., 265, 314, 519
Huff, E.J., 713
Huffman, D.L., 488, 1245
Hung, T.V., 848
Hung, T.Y., 1047
Huxsoll, C.C., 357
Hwang, H.T., 79
Hwang, K.T., 1208

I

IFT, 1185
Ida, E.I., 375
Imafidon, G.I., 1300
Imai, C., 785
Ingemansson, T., 513
Ingham, S.C., 935
Ishii, K., 619
Ito, O., 753
Itoh, M., 38
Iyengar, R., 797

J

Jack, F.R., 1313
Jagerstad, M., 215
Jahncke, M., 62
Jenkins, R.K., 717
Jensen, K.A., 453
Jimenez-Colmenero, F., 656
Johnson, J.H., 950
Johnson, M.G., 1132
Jones, D.D., 1191
Jones, G.A., 935
Jones, W.R., 488
Ju, J., 675
Juneja, L.R., 743

K

Kadan, R.S., 1294
Kamata, S., 753
Kantt, C.A., 104, 1307
Karbel, E.L., 140, 1070
Karel, M., (6)ii
Karleskind, D., 991
Karr, W.L., 675
Kashima, M., 66
Kastner, C.L., 53, 464
Kaufmann, P., 513
Kawabata, M., 785
Kazeniac, S.J., (4)ii
Keay, C.L., 1418
Kenney, P.B., 53
Ketelsen, S.M., 599, 1418
Khan, K., 395, 1404
Kiesvaara, M., 1212
Kikuzaki, H., 1407
Kim, B.K., 9, 21
Kim, D.M., 1111, 1115
Kim, H.S., 845
Kim, J.M., 71
Kim, M., 743
Kim, M.R., 128
Kim, S-H., 473, 531
Kincal, N.S., 413
King, J.W., 950
Kinsella, J.E., 158, 439, 1036, 1148
Kiriyama, S., 1393
Kirleis, A.W., 342
Kitabatake, N., 229
Klein, B.P., (3)ii, 5, 239
Knipe, C.L., 484
Knorr, D., 1371
Kocher, P.N., 1040
Koketsu, M., 743
Kolbe, E., 1065
Kondo, T., 788
Kondo, Y., 38
Konja, G., 680
Konno, K., 1198
Krochta, J.M., 899, 904
Kropf, D.H., 53
Ku, Y., 365
Kugino, K., 321
Kugino, M., 321
Kumagni, H., 619
Kumazawa, Y., 1062
Kushida, H., 38
Kwok, K.C., 859

L

Laburza, T.P., 445
Lai, H.M., 1103
Lajolo, F.M., 148
Lamberg, I., 827
Lampi, B., 1084
Lampi, K.A., 633
Lan, Y.H., 963
Lanari, M.C., 701
Landon, M., 153
Lanier, T.C., 467, 473, 531
Larick, D.K., 1237
Lavelle, C.L., 727, 983
Lavigne, C., 756
Law, R., 1191
Lawless, H.T., 108, 134
Laye, L., 991
LeBars, D., 1005
Lebert, A., 449
Lecomte, N.B., 464
Lee, C.M., 535, 880
Lee, C.Y., 586, 1111, 1115
Lee, E., 99
Lee, J.K., 199
Lee, L.Z., 1365
Lee, S.-Y., 124
Lee, T-C., 310
Lencki, R.W., 1365
Lenage, L., 1303
Leung, C-K., 519
Li, B.W., 929
Li, K-Y., 644
Li, W., 501
Li-Chan, E., 656
Liao, C.C., 430
Lin, C-W., 249
Lin, D., 1050
Lindley, M.G., 589, 592
Lindsay, J.A., 223
Lindsay, R.C., 292, 835
Ling, P.P., 1390
Litchfield, J.B., 168
Littell, R.C., 801
Liu, J.C., 638
Liu, L.H., 848
Lo, K.V., 1282
Lopez, V., 292
Loret, M.O., 1099
Lorient, D., 1303
Lorri, W., 408
Lowe, T.E., 770
Lozano-De-Gonzalez, P.B., 399
Lu, D.D., 1010
Luchansky, J.B., 38
Luna, J.A., 821
Lund, D.B., 186
Lundy, A., 761
Lyon, B.G., 177

M

MacNeil, J.H., 1013, 1017
Madhavi, D.L., 939
Makarios-Laham, I.K., 310
Makhlouf, J., 338
Makua, D.J., 1132
Malundo, T.M.M., 120
Manas, E., 642
Mandigo, R.W., 691, 948
Mangia, A., 968
Manu-Tawiah, W., 475
Marechal, P.A., 1346
Marino de Caceras, F., 611
Marriott, N.G., 259
Marshall, D.L., 697
Marshall, E.T., 557
Marshall, M.R., 193
Martin, B., 1378
Martin, J.W., 59
Martin, S.E., 1249
Martin-Polo, M., 426
Martinez, A., 649
Martinez, C.S., 1324
Martinez-Anaya, M.A., 419
Mast, M.G., 1013, 1017
Matsuura, F., 743
Matsuura, M., 144
Matthews, R.F., 801, 1129
Matulis, R.J., 482
Matzinos, P.D., 1021
Mau, J-L., 331
McClements, D.J., 1036, 1148
McCord, J.D., 863
McCormick, R.J., 497
McCurdy, A.R., 935, 1254
McDaniel, M.R., 633, 893
McDonough, C., 199
McEvily, A.J., 797
McFeeters, R.F., 325, 813, 832
McGlynn, W.G., 614
McKeith, F.K., 5, 239, 254, 482,950, 963, 978, 1249
McLellan, M.R., 369
McMillin, K.W., 697
McNeill, V.L., 1142
McWatters, K.H., 1318
Means, W.J., 1, 1231
Medeiros, L.C., 731
Melton, S.L., 90, 1079
Meredith, F.I., 177
Merkle, J.A., 1237
Meyers, S.P., 99
Michaels, N., 633
Michel, I., 756
Mikel, W.B., 1245
Miller, A.R., 361
Miller, L.F., 480
Miller, M.F., 461
Miller, R.L., 1076
Milne, J.M., 780
Minegishi, Y., 785
Miyazawa, T., 66
Mohamed, A.A., 342
Molins, R.A., 475, 953
Monahan, F.J., 1036
Mondy, N.I., (3)iv, 132, 1375
Monzalvo-Gonzalez, A., 797, 1118
Montano, A., 842
Montelongo, J-L., 863
Moody, W.G., 1231, 1241
Moon, M.H., 1166
Moran, M., 1212
Mori, T., 788
Morissey, M.T., 1050, 1055
Morita, T., 1393
Morr, C.V., 124, 991
Morris, J.R., 1132
Morrissey, P.A., 233
Motoki, M., 1062
Mulet, A., 805
Munoz, R., 611
Munshi, C.B., (3)iv, 132, 1375
Murti, T.W., 153
Myers, D.J., 475

N

Nakai, S., 656, 1152, 1282
Nakatani, N., 1407
Neubel, C., 1356
Neumann, P.E., 567
Nguyen-The, C., 351, 840
Nguyen, T.T., 189
Nielsen, S.S., 1010
Nnanna, I.A., 562, 1277
Northcutt, J.K., 983
Novakofski, J.R., 950, 963, 978,1249
Noyes, O.R., 1179

O

O'Connor, P.L., 950, 978
O'Neill, E.O., 1262
Obata, A., 144
Ockerman, H.W., 492, 1265
Ohba, R., 307
Ohsako, Y., 619
Ohta, M., 743
Olafsson, G., 215
Olds, S.J., 506
Olds-Weese, J., (5)ii
Olofi, R.Y., 1157
Olson, D.G., 475, 484
Omary, M.B., 623
Orton, W.L., 950
Osadjan, P.D., 482
Oste, R., 215, 827
Ottonello, S., 237
Owusu, R.K., 295

P

Packard, P.T., 1378, 1401
Padilla-Zakour, O., 369
Padua, G.E., 1426
Padua, G.W., 603
Panersa, E.D., 705
Paraf, A., 1291
Pareilleux, A., 1099
Park, H.J., 1361
Park, J., 9, 21
Park, J.W., 487
Park, K-H., 405
Park, P.S.W., 220
Park, Y.W., 245
Parker, A.H., 314
Parolari, G., 968
Parrish, F.C. Jr., 713
Part, C., 724
Paterson, A., 1313
Patience, J.F., 1254
Paulson, A.T., 1057
Pedreno, M.A., 611
Pek, U-H., 405
Peleg, M., 1356
Penfield, M.P., 138, 574, 579, 1079
Pensabene, J.W., 62
Peria, M.J., 649
Perng, S.K., 501
Perry, A.K., 140
Pestka, J.J., 1258
Petersen, A., 47
Peterson, J.C., 453
Petterson, A., 513
Piggott, J.R., 1313
Pike, O.A., 653
Pilkington, D.H., 467
Pinthus, E.J., 204
Pitarch, B., 419
Pombo, M., 596
Ponappa, T., 361
Powers, J.R., 453
Prabhu, G.A., 963
Prinyawiwatkul, W., 1318
Prost, C., 586
Proulx, W.R., 382, 1401
Prudencio-Ferreira, S.H., 378
Prusa, K.J., 480

Q

Qin, W.H., 859

R

Raharjo, S., 921
Rahman, M.S., 522
Ramanathan, L., 318
Ramsey, C.B., 342, 461
Randall, V.G., 987
Ranhotra, G.S., 1176
Rankin, S.A., 653
Rao, M.A., 116, 173, 876, 1001
Reyna-Duarte, P., 389
Reagan, J.O., 461
Regenstein, J.M., 79, 116, 1208
Reid, D.S., 675
Renken, S.A., 552
Reppond, K.D., 96
Ressurreccion, A.V.A., 120
Reynolds, J., 761
Rhee, H.S., 128
Rhee, K.C., 9, 21
Rhee, K.S., 9, 21
Richard, H., 586
Richter, E.R., 430
Riesen, J.W., 1273
Riha, W.E., 671
Rincon, F., 856
Rizvi, S.S.H., 748, 764, 996
Robe, G.H., 1241
Robel, A., 508
Robertson, J.A., 177
Rodrigo, M., 649
Rogers, R.W., 59
Rooney, L.W., 199
Ros Barcelo, A., 611
Ros, G., 856
Rosenberry, L., 996
Rosenholtz, N.S., 663
Rossello, C., 805
Roudot-Algaron, F., 1005
Rourke, T.J., 973
Rule, D.C., 497
Rupnow, J.H., 389
Rushing, J.W., 623
Ryder, J.M., 770
Ryu, G.H., 567

S

Safon, J., 649
Sagi, I., 1208
Saguy, I.S., 204
Saidi, B., 548
Saito, M., 739
Sakai, N., 1335
Sakaurai, M., 738
Sakurai, H., 619
Sakyama, T., 413
Sanchez, A.H., 842
Sanchez, T., 649
Sandberg, A-S., 408
Santerre, A.L., 1099
Sapers, G.M., 1076
Sapru, V., 223, 445
Sato, K., 785
Saura-Calixto, F., 642
Sayler, D.F., 890
Schaake, S.L., 1231
Schade, J.E., 987
Schaefer, A.L., 1254
Schaefer, D.M., 28, 701
Scheerens, J.C., 361
Scheller, K.K., 28, 701
Schleusener, D.S., 53
Schmidt, G.R., 921, 959, 1224
Schmidt, K., 761
Schmidt, K.A., 1142
Schmidt, S.J., 140, 168, 1162, 1070,1103
Schreurs, F.J.G., 274
Schwartz, S.J., 817
Schwenke, J.R., 53
Scott, E.P., 1157
Searcy, G.K., 710
Sebranek, J.G., 254, 953
Seetha, R., 853
Seguro, K., 1062
Seib, P.A., 845
Shah, K.K., 186
Shand, P.J., 1224, 1254
Shantha, N.C., 233
Shasha, B.S., 793
Sheen, S., 186
Sherbon, J.W., 748
Sheu, T.Y., 557
Shewfelt, R.L., 75
Shi, Z., 1068
Shigeta, J-I., 788
Shimizu, Y., 785
Shoemaker, C.F., 1172
Sievert, D., 1332
Silva, E.R., 821
Sim, J.S., 43, 270, 278, 283, 288
Simal, S., 805
Simoneau, C., 1148
Sims, C.A., 193, 1129
Singh, H., 299
Singh, R.P., 1145
Singh, U., 853
Slattery, S.L., 780
Slowinski, L.A., 1103
Smerage, G.H., 223
Smith, D.M., 1047, 1258
Smith, N.L., 1111, 1115
Smith-Gill, S., 1291
Sofos, J.N., 921, 959, 1224
Soler, L., 805
Sonego, L., 1397
Sosulski, F.W., 1090, 1095
Spanos, G.A., 817
Spencer, G.F., 793
Stillman, J.A., 810
Stillmunkes, A.A., 953
Stuart, M.R., 583
Su, C.K., 303
Su, S.K., 638
Sugiyama, M., 785
Sun, X., 168
Svanberg, U., 408

T

Tagliavini, J., 237
Takahashi, K., 734
Takahashi, T., 197
Takamura, M., 1062
Tamura, M.S., 1172
Tan, S., 285
Tarky, W., 774
Tatsumi, Y., 1390
Taylor, S.L., 385
Teixeira, A.A., 223
Teramoto, Y., 307
Terrell, F.R., 1132
Testin, R.F., 212, 623, 1086, 1361
Thayer, D.W., 717
Thed, S.T., 75
Thomas, D.R., 914
Thomas, R.L., 544
Thompson, L.D., 242
Thompson, R.L., 325, 832
Thu Thao, L.T., 375
Toldra, F., 724
Toledo, R.T., 888, 908
Tong, C.H., 186, 1329
Torres, J.A., 104, 644, 774, 914,1307
Torres, V., 134
Toupin, C., 1365
Townsend, W.E., 710
Trewhella, M.A., 848
Trigiano, M.K., 1079
Trivedi, A.B., 229
Trivellone, E., 1286
Trugo, L.C., 627
Trugo, N.M.F., 627
Trziska, T.L., 274
Tsai, G.J., 303
Tsai, L-S., 987
Tsang, J.C., 859
Tsao, G.T., 303
Tsatsaroni, E., 1073
Tseng, D.J., 801
Tsimidou, M., 1073
Tsukamasa, Y., 785
Tsumura, F., 619

U

Ueda, S., 307
Uijttenboogaart, T.G., 274
Ushiyama, K., 753

V

Van Buren, J.P., 173
Vanderslice, J.T., 505
Vasseur, J., 449
Vaughn, S.F., 793
Venugopal, R.J., 935
Vercellotti, J.R., 1294
Vergano, P.J., 1361
Virgili, R., 968
Voilley, A., 426, 1303
Voirin, T., 1346
Voragen, A.G.J., 1349

W

Walker, C.E., 567
Walter, W.M. Jr., 813
Wan, P.J., 1294
Wang, C.H., 1258
Wang, J., 884, 1340
Wang, T., 631
Waniska, R.D., 199
Warthesen, J.J., 548, 552
Washington, A.C., 245
Watada, A.E., 618, 1390
Weaver, C.M., 382, 605, 1378
Wei, C.I., 801
Weinberg, P., 204
Weller, C.L., 212, 1086, 1361
Weller, K.M., 453
Wells, R.M.G., 770
Wendorff, W.L., 671
Wessien, B., 215
Wicker, L., 473, 531
Wiet, S.G., 595, 599, 1418
Wilhelmsen, E., 1411
Willemot, C., 182, 338
Williams, A., 295
Williams, E.S., 731
Williams, S.N., 28, 1273
Wilson, J.L., 90
Wilson, R.L.Jr., 710
Wimmer, M.P., 254
Withy, L.M., 190
Wolfe, F.H., 278, 283, 288
Wolters, M.G.E., 1349
Wrolstad, R.E., 190, 399, 633, 1135
Wu, J.W., 1050
Wu, S.Y., 1219
Wu, Z-H., 321
Wurm, C.M., 132
Wursch, P., 1332

X

Xiong, Y.L., 164, 720, 1241

Y

Yamada, Y., 1026
Yamamoto, T., 743
Yamauchi, N., 616
Yang, R., 1079
Yano, T., 413
Yee, L.N., 761
Yetim, H., 492, 1265
Yin, M.C., 1273
Yoo, B., 880
Yook, C., 405
Yoshida, K., 788
Yost, R.A., 158
Younathan, M.T., 697
Yu, Z-R., 996
Yun, J.J., 1001

Z

Zamora, R., 667
Zayas, J.F., 464
Zhao, J., 335
Ziegler Jr., G.M., 1294
Ziegler, G.R., 331
Zorba, O., 492

Subject Index, Volume 58, 1993

A

absorbability
of Ca from beans, 1401; of Ca from brassica vegetables: broccoli, bok choy and kale, 1378

absorption
of oil in snack food from chickpea, 853; of water in chickpea and field pea using Peleg model, 848

acceptability
of marinated fresh and precooked pork, 1249

acid
acetic: delamination of polyethylene and aluminum foil layers of laminated packaging material by, 215; firmness retention in pickled peppers as affected by, 325
amino: in fermenting wheat sourdough, 1324
ascorbic: assay for in food using peroxidase, 619; delays oxymyoglobin and phospholipid oxidation, 1273; inhibition of papain in meat by potato protein or, 1265; modified atmosphere packaging affects broccoli, 140; zinc fertilization increases content of potatoes, 1375
chlorogenic: accumulation in carrots during storage in polypropylene film, 840
ellagic: factors influencing precipitation in grape juice during storage, 193
erythroascorbic: in yeast and effects on wheat dough, 845
fatty: composition of goat organ and muscle meat, 245; dietary antioxidants and storage affect chemical characteristics of omega-3 enriched chicken, 43; of amur fed different diets, 90
gluconic: influences texture and color of canned asparagus, 614 lactic: drying temperature and time affect quality of Chinese-style sausage inoculated with bacteria, 249; fermentation of cereals: effects on estimation of Fe availability and phytate hydrolysis, 408; Lactobacillus salivarius for conversion of soy molasses into, 863
malic: analysis in cucumber juice and fermentation brines in presence of interfering fructose, 832
organic: changes during ripening of processing peaches, 631
pantothenic: retention in cooked legumes, 1084
solid-phase extraction improves TBA method to determine lipid oxidation, 921
sorbic: yeast inhibition in grape juice containing, 1132
thiobarbituric (TBA): solid-phase acid extraction improves method to determine lipid oxidation, 921

acid/base physiology
of stress susceptible pigs affects sensory quality of roasts, 1254

activators
affect enzymic lipid peroxidation system of catfish muscle microsomes, 71

actomyosin
polymerization of beef induced by transglutaminase, 473; protein concentration, pH and ionic strength affect viscosity of, 1269

additives
affect deoxynivalenol (vomitoxin) flour during breadbaking, 416

adsorbents
sorption of ethyl butyrate and octanal of orange essence by polymeric, 801

adsorption
oil-soluble surfactants have little effect on lactalbumin and lactoglobulin in emulsions, 295

adulterants
lysozymes in eggs and plasma from chicken, duck and goose: choice and use of mAbs to detect in foie gras, 1291

Aeromonas hydrophila
on catfish cooked in microwave, 519

aflatoxin
contamination in nutmeg: analysis of interfering TLC spots, 197; formed on prolonged heating of citrinin under watery conditions, 229

agar
microwave heating of gels containing sucrose, 1426; proton NMR and dielectric measurements on sucrose filled gels, 603

agglomeration
fractal analysis to characterize ruggedness changes in tapped food powders, 1030

aggregation
of myosin subfragments from cod and herring, 1057

aging
affects color, metmyoglobin and oxygen consumption of beef muscles, 939; bovine longissimus muscle tenderness affected by postmortem time, 713; effect on rheological changes during gelation of high-methoxyl pectin/fructose dispersions, 173; time and temperature influence on indicators for cheddar cheese, 1307

algin
properties of /Ca and salt/phosphate structured beef rolls with added gums, 1224

alginate
depression of water activity by soluble and insoluble solids in restructured beef heart muscle, 959; HPLC quantitation of added to ground pork, 973

allergy
reactivity of soybean products as determined by RAST inhibition, 385

aluminum
delamination of foil layers of laminated packaging material by acetic acid, 215

aminopeptidase
porcine activity affected by curing agents, 724

amur (Ctenopharyngodon idella)
fatty acid composition, lipids and sensory characteristics of fed different diets, 90

amylose
chain association based on DSC, 1332

analysis
aflatoxin contamination in nutmeg: interfering TLC spots, 197; amino acid profiles in fermenting wheat sour doughs, 1324; anthocyanin from Tradescantia pallida, 1068; assessing chemical form of Ca in wheat, spinach and kale, 605; carbohydrate or protein based fat mimicker effects on ice milk properties, 761; changes in defatted peanut flour caused by fungal fermentation and heat treatment, 1318; changes in phenolic content in shredded carrots during storage, 351; chemical, microbiological and sensory properties of plain nonfat yogurt, 991; cholesterol content and functionality of plasma and granules fractionated from egg yolk, 1277; composition and gel-forming properties of vacuum- evaporated liquid egg white, 1013; composition and sensory characterization of red raspberry juice concentrated by direct-osmosis or evaporation, 633; composition and structural characteristics of soy proteins from broken and damaged seeds, 148; concentration of phenolic compounds change in storage brines of ripe olives, 347; crabcake from crab processing by-products: development and sensory evaluation, 99; cure levels, processing methods and meat source effects on low-fat frankfurters, 59; dietary antioxidants and storage affect chemical characteristics of omega-3 fatty acid enriched chicken, 43; enzyme pretreatment of pinto bean high protein fraction and time of blending corn meal affects extrudate properties, 1404; extruded potato peel functional properties affected by extrusion conditions, 335; extrusion of defatted soy flour, corn starch and beef blends, 9; fat level and freezing temperature affect sensory, shear, cooking and compositional properties of ground beef patties, 34; fatty acid composition of goat organ and muscle meat, 245; flavor constituents of aqueous fraction extracted from comte cheese by liquid CO2, 1005; heating and texture of beef from precooked roasts, 5; high-protein texturized products of defatted soy flour, corn starch and beef: shelf-life, physical and sensory properties, 21; irradiation affects physical properties of dry bean starch, 389; lactobacillus spp from Washington state wines: isolation and characterization, 453; marbling, fat trim and doneness effects on sensory attributes, cooking loss and composition of cooked beef steaks, 242; myofibrillar proteins from cold-shortened and thaw-rigor beef, 720; of disaggregation of pectin during plate module UF, 680; of influence of surface conductance and component arrangement in heat and moisture transfer in composite food, 1335; of malic acid in cucumber juice and fermentation brines in presence of interfering fructose, 832; of metabolic phosphates in plants, 890; of trypsin-like enzyme from crab, 780; pericarp thickness and other kernel physical characteristics relate to microwave popping quality of popcorn, 342; permeability and mechanical properties of cellulose-based edible films, 1361; physical and sensory characteristics of low fat ground beef, 461; pollack and surimi as partial meat substitutes in frankfurters: nitrosodimethylamine formation, 62; predicting protein functionality with neural networks: foaming and emulsifying properties, 1152; properties of acidic whey protein gels containing emulsified butterfat, 158; properties of algin/Ca and salt/phosphate structured beef rolls with added gums, 1224; protease inhibitors affect physical properties of flounder and pollock surimi, 96; radiation affects cell wall composition of strawberries, 182; relation between availability of mineral and food composition, 1349; relationships between electromyography, sensory and instrumental measures of cheddar cheese texture, 1313; sensory evaluation of hearts of palm, 134; sensory property relationships to chemical data of Italian type dry cured ham, 968; storage changes of crab in different types of packaging, 314; storage

conditions affect quality of raisins, 805; stress relaxation of fruit gels: evaluation of models and effects of composition, 1125; surimi-like products from mutton, 497; tocopherol extraction with application to quantitation of lipophilic nutrients, 663; utilization of surimi-like products from pork in restructured pork roast, 53; validity of descriptive and defect-oriented terminology systems for sensory analysis of milk, 108; washed mechanically separated pork as a surimi-like meat-product ingredient, 254

anthocyanin
identification from Tradescantia pallida by LSI-MS and chemical analysis, 1068; of red raspberry juice: influences of cultivar, processing and environmental factors, 1135; storage changes in content of raspberry juice concentrate, 190; formation from cells cultured from strawberry, 788

antibacterials
effect in S aureus subjected to low EtOH concentrations, 435

antibodies
IgG from egg yolk: purification by ethanol fractionation, 739; lysozymes in eggs and plasma from chicken, duck and goose: choice and use of monoclonals to detect adulterants in foie gras, 1291; purification from separated egg yolk, 1282

antioxidant
affect chemical characteristics of omega-3 fatty acid enriched chicken, 43; affect enzymic lipid peroxidation system of catfish muscle microsomes, 71; effects of ginger constituents, 1407; extraction and activity of carnosine in beef muscle, 1; gelation of myofibrillar protein isolated from beef heart, 1241; prevention of lipid oxidation in turkey with, 283; cholesterol autoxidation inhibition varies among natural, 653

apple
binding of zinc to fiber and wheat bran, 365; browning during storage preserved by combined methods: 4-hexylresorcinol as anti-browning agent, 797; cross-flow microfiltration with gas backwash of juice, 638; enzymatic browning inhibited in rings by pineapple juice, 399; mass transfer and textural changes during processing of, 1118; optimization and modeling of juice cross-flow microfiltration with ceramic membrane, 369; quality of minimally processed slices, 1115; variations in response to heat treatment and minimal processing, 1111

aroma
extraction of cookie compounds from aqueous and dough model system, 586

ascorbate
absorption by catfish as function of concentration, pH, and duration of exposure, 75; modified atmosphere packaging affects broccoli, 140

asparagus
gluconic acid influences texture and color of canned, 614

aspartame
fat concentration affects sweetness and sensory profile of, 599

astaxanthin
lipid hydrolysis and oxidation related to in muscle of frozen trout, 513

astringency
temperature affects removal and recurrence in persimmon, 1397

atmosphere
L. monocytogenes and Y. enterocolitica in pork packaged under modified gas, 475; microbiology of fresh beef packaged under modified, 935; modified packaging affects ascorbic acid, enzyme activity and market quality of broccoli, 140; modified packaging protects market quality in broccoli under ambient temperature storage, 1070; optimal controlled conditions for broccoli storage, 338; pigment changes in parsley during storage in controlled or ethylene containing, 616; suitability of plastic films for modified packaging of fruits and vegetables, 1365

autolysis
of squid muscle protein as affected by storage conditions and inhibitors, 1198; protease inhibitor effects on torsion measurements of whiting surimi, 1050

autoxidation
cholesterol inhibition varies among natural antioxidants, 653

availability
lactic fermentation of non-tannin and high-tannin cereals: effects on estimation of Fe, 408; relation between minerals and food composition, 1349

B

backwash
cross-flow microfiltration with of apple juice, 638

bacon
nonane as radiolytic product in irradiated, 49

bacteriocin
Pediococcus acidilactici production in whey permeate and inhibition of L monocytogenes in foods, 430

baking
pasting of wheat flour extrudates containing conventional ingredients, 567

batter
low-fat, high added water bologna from massaged, minced, 259; manufactured with modified beef connective tissue, 691; melt point of encapsulated Na bicarbonates: effect on, 574; particle size of encapsulated Na bicarbonate: effect on, 579

bean
absorbability of Ca from, 1401
green: panelist texture preferences affect sensory evaluation of, 138
irradiation affects physical properties of starch, 389
pinto: enzyme pretreatment of high protein fraction and time of blending corn meal affects extrudate properties, 1404; extrusion of high protein fraction pretreated with papain and cellulase, 395

beef
aging and processing affect color, metmyoglobin reductase and oxygen consumption of muscle, 939; boning methods and binders affect bind and sensory characteristics of structured, 1231; catalysis of lipid oxidation by iron from an insoluble fraction of muscle, 233; cryostabilization of functional properties of pre- and post-rigor by dextrose polymer and phosphates, 467; denaturation of lactate dehydrogenase during spray-drying of bovine plasma, 1021; depression of water activity by soluble and insoluble solids in alginate restructured heart meat, 959; dietary α-tocopheryl acetate enhances quality in Holstein and beef breed steers, 28; dietary vitamin E enhances color and display life of from Holstein steers, 701; display, packaging and meat block location effects on color and lipid oxidation in, 1219; end point temperature affects glucosaminidase activity in, 710; extraction and activity of carnosine in muscle, 1; extrusion of blends, 9; fat and cholesterol content affected by supercritical CO_2 extraction, 950; fat level and freezing temperature affect sensory, shear, cooking and composition properties of ground, 34; gelation of myofibrillar protein isolated from heart under antioxidative conditions, 1241; heating and texture of from precooked roasts, 5; inhibition of papain in meat by potato protein or ascorbic acid, 1265; iron distribution in muscle, 697; longissimus muscle tenderness as affected by postmortem aging time, animal sex and age, 713; marbling, fat trim and doneness effects on sensory attributes, cooking loss and composition of steaks, 242; meat batters manufactured with connective tissue, 691; microbiological safety of cooked treated with lactate, monolaurin or gluconate, 953; microbiology of fresh packaged under modified atmosphere or vacuum, 935; myofibrillar proteins from cold-shortened and thaw-rigor beef, 720; mutagen formation in processed by frying or microwave with use of flavoring and browning agents, 1216; physical and sensory characteristics of low fat ground, 461; polymerization of actomyosin induced by transglutaminase, 473; post-packaging pasteurization reduces C perfringens in vacuum-packaged chunks, 239; properties of algin/Ca and salt/phosphate structured rolls with added gums, 1224; setting response of pollick surimi compared with myofibrils, 531; sex determination on samples by PCR, 237; shelf-life, physical and sensory properties of high-protein products of, 21; time-intensity methodology for tenderness perception, 943; triglyceride content of supercritical CO_2 extracted fractions of fat, 1237

beverage
color influences flavor identification in fruit-flavored, 810; cross-flow microfiltration with gas backwash of apple juice, 638; factors influencing ellagic acid precipitation in muscadine grape juice during storage, 193; Lactobacillus from WA state wines: isolation and characterization, 453; optimization and modeling of apple juice cross-flow microfiltration with ceramic membrane, 369; storage changes in anthocyanin content of raspberry juice concentrate, 190; vanillin interaction with milk protein isolates in sweetened drinks, 1142

Bifidobacterium
bacterial growth and volatile compounds in yogurt-type products from soymilk containing, 153

binders
affect bind and sensory characteristics of beef, 1231

bioavailability
trypsin inhibitor and tannin do not affect Ca in legumes, 382

biotin
retention in cooked legumes, 1084

bison
selenium content in, 731

blanching
potato cube response to, 1371

blending
time in corn meal affects extrudate properties, 1404

bok choy
absorbability of Ca from, 1378

bologna
low-fat, high added water from massaged minced batter, 259; pre-emulsified corn oil, pork fat, or added moisture affect reduced fat, 484

boning
methods and binders affect bind and sensory characteristics of beef, 1231

bran
binding of zinc to wheat, 365; temperature and pH effects on oat gum and glucan from, 562

Brassica
absorbability of Ca from vegetables, 1378

bread
soy flour lipoxygenase isozyme mutant effects on dough volatiles, 583

breadbaking
additives affect deoxynivalenol (vomitoxin) flour during, 416; chemometrics assess quality of starters, 419

brine
concentration of phenolic compounds change in storage of ripe olives, 347; malic acid analysis in cucumber juice and fermentation in presence of interfering fructose, 832

broccoli
absorbability of Ca from, 1378; modified atmosphere packaging affects ascorbic acid, enzyme activity and market quality of, 140; modified atmosphere packaging protects market quality under ambient temperature storage, 1070; optimal controlled atmosphere conditions for storage of, 338

browning
control during storage of apple slices preserved by combined methods: 4-hexylresorcinol as anti-agent, 797; control in potatoes by surface digestion, 1076; in (E)-4,5-epoxy- (E)-2-heptenal/lysine model system, 667; inhibited in apple rings by pineapple juice, 399; mutagen formation in beef processed by frying or microwave with use of agents, 1216; potential of liquid smoke solutions: comparison of methods, 671

buffer
stability of neohesperidin dihydrochalcone in, 589

bulking
energy value of agents, 1176

butterfat
properties of acidic whey protein gels containing emulsified, 158

by-products
volatiles in crab and, 1203

C

cabbage
packaging effects on L innocua in shredded, 623; volatile sulfur formed in disrupted tissues of, 835

calcium
absorbability from beans, 1401; absorbability from broccoli, bok choy and kale, 1378; assessing chemical form of in wheat, spinach and kale, 605; induced gelation of pre-heated whey protein isolate, 867; properties of /algin and salt/phosphate structured beef rolls with added gums, 1224; soluble and lipid bound during processing of infant milk formulas, 756; trypsin inhibitor and tannin do not affect bioavailability of in legumes, 382; water vapor permeability of caseinate based edible films affected by crosslinking, 904

calcium alginate
microentrapment of lactobacilli in gels, 557

calcium chloride
firmness retention in pickled peppers as affected by, 325

calcium lactate
firmness of canned grapefruit improved with, 1107

calibration
reference materials for measuring thermal conductivity in frozen foods, 186

calorimetry
amylose chain association based on, 1332
differential compensated: enthalpy of frozen foods determined by, 675
differential scanning: measurement of food thermal conductivity using, 1145

canola
potato chips fried in oil maintain high quality, 1079

Capsicum annuum
dihydrocapsaicin oxidation by peroxidase, 611

carbohydrate
based fat mimicker effects on ice milk properties, 761; germination and debittering lupin seeds reduce fermentation in humans, 627; maple syrup in dry sausage fermentation, 981; sweetness adaptation of, 595; time-intensity parameters of, 1418

carbon dioxide
carbonated water lexicon: influence on descriptive ratings, 893; fat and cholesterol content of beef affected by supercritical extraction, 950; flavor constituents of aqueous fraction extracted from comte cheese by liquid, 1005; milk fat fractionation with continuous counter-current supercritical, 748; phase equilibria and distribution coefficients of gamma-lactones in supercritical, 996; supercritical extraction of carotene from sweet potatoes, 817; triglyceride content of supercritical extracted fractions of beef fat, 1237

carbonation
water lexicon: temperature and CO2 influence on descriptive ratings, 893

carnosine
extraction and activity in beef muscle, 1

carotene, β-
supercritical CO_2 extraction from sweet potatoes, 817

carrot
accumulation of chlorogenic acid during storage in polypropylene film, 840; changes in phenolic content during storage, 351; lignin formation and surface discoloration of, 1065; optimization of juice color and cloud stability, 1129; sodium chloride treatment or waterjet slicing effects on white tissue development in sticks, 1390

casein
digestibility of whey protein complexes isolated from heated concentrated milk, 299; sorption behavior of mechanically mixed and freeze-dried sucrose mixtures, 1162

caseinate
water vapor permeability of based edible films affected by pH, Ca crosslinking and lipid content, 904

casing
edible meat from reconstruction of collagen-elastin matrix, 734

catalase
glucose for control of shrimp microbial spoilage, 104; glucose improves preservation of shrimp, 774

catalysis
of lipid oxidation by iron from an insoluble fraction of beef, 233

catfish
antioxidants, activators, and inhibitors affect lipid peroxidation system of muscle microsomes, 71; ascorbate absorption as function of ascorbate concentration, pH and duration of exposure, 75; fate of L monocytogenes and Aeromonas hydrophila on cooked in microwave, 519; lipid extraction from muscle: comparison of solvent systems, 84

cellulase
extrusion of pinto bean high protein fraction pretreated with, 395

cellulose
permeability and mechanical properties of -based edible films, 1361

ceramic membrane
optimization and modeling of apple juice cross-flow microfiltration with, 369

cereal
compressive stress-strain relationships of two puffed, 1356; lactic fermentation of non-tannin and high-tannin: effects on estimation of Fe availability and phytate hydrolysis, 408

cheese
camembert: sodium chloride and magnesium chloride affected by ripening of, 1303
cheddar: time and temperature influence on chemical aging indicators for, 1307; relationships between electromyography, sensory and instrumental measures of texture, 1313
comte: flavor constituents of aqueous fraction extracted from cheese by liquid CO_2, 1005
mozzarella: rheological behavior of low-moisture part-skim, 764; rheological properties of filled with dairy, egg, soy proteins and gelatin, 1001

chemometrics
assess quality of breadmaking starters, 419

chicken
chlorine uptake by frankfurters immersed in chlorinated water, 987; cryoprotectant effects during frozen storage of myofibrillar protein isolates, 274; dietary antioxidants and storage affect chemical characteristics of omega-3 fatty acid enhanced, 43; internal temperature and packaging system affect stability during storage, 265; iron distribution in muscle, 697; lysozymes in eggs and plasma from: choice and use of mAbs to detect adulterants in foie gras, 1291;

viscoelastic properties of myofibrillar protein-polysaccharide composite gels, 164; vitamin B6 in raw and fried by HPLC, 505; vitamin B_6 in raw/fried, (5)ii

chickpea
oil absorption and sensory properteis of snack food from, 853; water absorption in using Peleg model, 848

chlorine
uptake by chicken frankfurters immersed in chlorinated water, 987

cholesterol
autoxidation inhibition varies among natural antioxidants, 653; content and functionality of plasma and granules fractionated from egg yolk, 1277; NMR study of autooxidation in egg powder and cookies exposed to adverse storage, 1286; of beef patties affected by supercritical CO_2 extraction, 950

chromatography
affinity: egg white lysozyme purification by, 303
gas: loss of volatile lipid oxidation products during thermal desorption in dynamic headspace-capillary, 220
high pressure liquid: quantitation of alginate or pectin added to ground pork, 973; vitamin B_6 in raw and fried chicken by, 505
thin layer: aflatoxin contamination in nutmeg: analysis of interfering spots, 197

Chromobacterium violaceum, Kurthia sp.
conversion of metmyoglobin to myoglobin by, 38

citrinin
toxic compounds formed on prolonged heating under watery conditions, 229

clarification
of egg yolk suspensions and solubilization of proteins from lipoproteins, 307

Clostridium perfringens
post-packaging pasteurization reduction of in vacuum-packaged beef chunks, 239

Clostridium sporogenes PA3679
kinetics of spore destruction using computer-controlled thermoresistometer, 649

cloud
optimization of carrot juice color and stability of, 1129

coagulability
of high-heat treated milk influenced by time of pH adjustment, 1300

coalescence
of whey protein stabilized milkfat peanut oil emulsions, 439

coating
from soy protein, 1086; sensory and textural characteristics of ham with emulsion of different fat levels, 482; to inhibit lipid migration in confectionery product, 1422

cod
thermal aggregation of myosin subfragments from, 1057

coffee
descriptive sensory profiling for optimizing formula of peanut milk-based whitener, 120

collagen
edible meat casing from reconstruction of elastin matrix, 734; procedure for soluble in thermally processed meat products, 948

color
aging and processing affect beef muslce, 939; dietary vitamin E enhances beef from Holstein steers, 701; display, packaging and meat block location effeects on beef, 1219; formation of anthocyanins from cells cultured from strawberry, 788; gluconic acid influences canned asparagus, 614; influences flavor identification in fruit- flavored beverages, 810; optimization of carrot juice, 1129; spectra of pigments responsible for pink in pork cooked to 65 or 82°C, 51

composite food
heat and moisture transfer in: theoretical analysis of influence of surface conductance and component arrangement, 1335

computers
kinetics of C sporogenes spore destruction using controlled thermoresistometer, 649

conductivity, thermal
maximum slope method for evaluating probe data, 1340; of starch gels at high temperatures influenced by moisture, 884; solid food determination at high temperatures, 908

confections
edible coating to inhibit lipid migration in, 1422

connective tissue
meat batters manufactured with modified beef, 691

consumerism
in-home evaluation of pork from pigs administered pSt, 480

cookies
extraction of aroma compounds from aqueous and dough model system, 586; NMR study of cholesterol autooxidation in exposed to adverse storage, 1286

cooking
fat level and freezing temperature affect ground beef, 34; fate of L monocytogenes and Aeromonas hydrophila on catfish in microwave, 519; marbling, fat trim and doneness effects on beef steaks, 242; spectra of pigments responsible for pink color in pork, 51

corn
extrusion of starch, 9; oil affects quality of reduced fat bologna, 484; shelf-life, physical and sensory properties of high-protein products of, 21; time of blending meal affects extrudate properties, 1404

cottonseed
potato chips fried in oil maintain high quality, 1079

cowpeas
mineral loss by pressure heating in water, 856

crab
crabcake from processing by-products: development and sensory evaluation, 99; purification of trypsin-like enzyme from, 780; storage changes in different types of packaging, 314; volatile flavor component in cooker effluent and concentrate, 525; volatiles in, 1203

cross-linking
gelatinization and retrogradation of rices, 405; formation of glutamyl-lysine in horse mackerel induced by drying, 1062; glutamyl-lysine formation in sardine myofibril sol during setting, 785; water vapor permeability of caseinate based edible films affected by Ca, 904

cryoprotectant
effects during frozen storage of chicken myofibrillar protein isolates, 274

cryostabilization
of functional properties of pre- and post-rigor beef by dextrose polymer and phosphates, 467

crystallization
droplet size and emulsifier type affect hydrocarbon in water emulsions, 1148

cucumber
malic acid analysis in juice and fermentation brines in presence of interfering fructose, 832; multiresponse optimization minimizes salt in fermentation and storage, 1381

curing
effects low-fat frankfurters, 59; porcine aminopeptidase activity as affected by, 724

D

daidzin
-glucosidases from soybeans hydrolyze, 144

dairy products
Mg selectively isolates gellan gum from, 539; rheological properties of mozzarella cheese filled with, 1001

debittering
of lupin seeds reduce galactoside and intestinal carbohydrate fermentation in humans, 627

deer, mule
selenium content in, 731

delamination
of polyethylene and aluminum foil layers of laminated packaging by acetic acid, 215

denaturation
of lactate dehydrogenase during spray-drying of bovine plasma, 1021; of whiting fillets, 1055

deoxynivalenol (vomitoxin)
additives affect flour during breadbaking, 416

deterioration
of pineapple concentrate, 1411

dextrose
cryostabilization of functional properties of pre- and post-rigor beef by, 467

dielectric measurement
on sucrose filled agar gels and starch pastes, 603

diet
'-tocopheryl acetate enhances beef quality in Holstein and beef breed steers, 28; antioxidants affect chemical characteristics of omega-3 fatty acid enriched chicken, 43; enzymetric-gravimetric method for total fiber in legumes compared with modified AOAC method, 929; fatty acid composition, lipids and sensory characteristics of amur fed different, 90; vitamin E enhances color and display life of beef from Holstein steers, 701

diffusion
in heated potato tissues, 827

digestibility
of whey protein/casein complexes isolated from heated concentrated milk, 299

digestion
control of enzymatic browning in potatoes by surface, 1076

dihydrocapsaicin
oxidation by Capsicum annuum peroxidase, 611

dimethyldicarbonate
yeast inhibition in grape juice containing, 1132

disaggregation
component analysis of pectin during plate module UF, 680

discoloration
on surface of minimally processed carrot sticks, 1065

disulfide
bond formation affects stability of whey protein isolate emulsions, 1036

dough
erythroascorbic acid in yeast and effects on wheat, 845; extraction of cookie aroma compounds from aqueous and, 586: sour: amino acids in fermenting wheat, 1324; soy flour lipoxygenase isozyme mutant effect on bread volatiles, 583

droplet
size affects crystallization and melting of hydrocarbon in water emulsions, 1148

drying
formulation of glutamyl-lysine cross-link in cured horse mackerel induced by, 1062; of cut pears to improve freeze/thaw texture, 357; temperature and time affect quality of Chinese-style sausage inoculated with lactic acid bacteria, 249

duck
lysozymes in eggs and plasma from: choice and use of mAbs to detect adulterants in foie gras, 1291

E

effluent
volatile flavor component in crab cooker, 525

eggs
cholesterol content and functionality of plasma and granules fractionated from yolk, 1277; clarificaton of yolk suspensions and solubilization of proteins from lipoproteins, 307; composition and gel-forming properties of vacuum-evaporated liquid white, 1013; concentration of liquid white by vacuum evaporation and RO, 1017; failure deformation and stress relaxation of heated white gels, 113; gel point of proteins using dynamic rheological data, 116; IgG from yolk: purification by ethanol fractionation, 739; lysozymes in from chicken, duck and goose: choice and use of mAbs to detect adulterants in foie gras, 1291; NMR study of cholesterol autooxidation in powder and cookies exposed to adverse storage, 1286; purification of antibodies from yolk, 1282; rheological properties of mozzarella cheese filled with, 1001; sialyloligosaccharides of delipidated yolk fraction, 743; white lysozyme purification by UF and affinity chromatography, 303

elastin
edible meat casing from reconstruction of collagen matrix, 734

electromyography
measure of cheddar cheese texture, 1313

electron microscopy
fixation staining for examining microstructure in whipped cream by, 124

ELISA
determination of turkey roll endpoint temperature: effects of formulation, storage and processing, 1258

elk
selenium content in, 731

emulsification
predicting protein functionality with neural networks, 1152

emulsifier
type affects crystallization and melting of hydrocarbon in water emulsions, 1148

emulsions
disulfide bond formation affects stability of whey protein isolate, 1036; droplet size and coalescence stability of whey protein stabilized milkfat peanut oil, 439; droplet size and emulsifier type affect crystallization and melting of hydrocarbon in water, 1148; oil-soluble surfactants have little effect on adsorption of lactablumin and lactoglobulin in, 295; salt, phosphate and oil temperature effects on capacity of fresh and frozen meat and sheep tail fat, 492; sensory and textural characteristics of ham coated with differing fat levels, 482

encapsulation
melt point of Na bicarbonates: effect on refrigerated batter and muffins baked in conventional and microwave ovens, 574; particle size of Na bicarbonates; effect on batter and muffins baked in conventional and microwave ovens, 579

energy
value of bulking agents, 1176

enthalpy
of frozen foods determined by differential compensated calorimetry, 675

enzymes
aging and processing affect color, metmyoblobin reductase and oxygen consumption of beef muscles, 939; antioxidants, activators, and inhibitors affect lipid peroxidation system of catfish muscle microsomes, 71; assay for ascorbic acid in food using peroxidase, 619; -glucosidases from soybeans hydrolyze daidzin and genistin, 144; browning inhibited in apple rings by pineapple juice, 399; control of browning in potatoes by surface digestion, 1076; denaturation of lactate dehydrogenase during spray-drying of bovine plasma, 1021; dihydrocapsaicin oxidation by Capsicum annuum peroxidase, 611; egg white lysozyme purification by UF and affinity chromatography, 303; end-point temperature affects N-acetyl-B-D-glucosaminidase activity in beef, pork and turkey, 710; extrusion of pinto bean high protein fraction pretreated with papain and cellulase, 395; fluorometric peroxygenase assay for lipid hydroperoxides in meats and fish, 66; glucose oxidase/catalase improves preservation of shrimp, 774; glucose oxidase/catalase solution for control of shrimp microbial spoilage: model studies, 104; gravimetric method for total dietary fiber in legumes compared with modified AOAC method, 929; heat inactivation of trypsin inhibitors in soymilk at ultra high temperature, 859; hexylresorcinol, a potent inhibitor of mushroom tyrosinase, 609; inhibition of papain in meat by potato protein or ascorbic acid, 1265; lysozymes in eggs and plasma from chicken, duck and goose: choice and use of mAbs to detect adulterants in foie gras, 1291; milk fat globule membrane substances inhibit mouse intestinal glucuronidase, 753; modified atmosphere packaging affects activity in broccoli, 140; optimizing assay and extraction of lipoxygenase in wheat germ, 1090; polymerization of beef actomyosin induced by transglutaminase, 473; porcine aminopeptidase activity as affected by curing agents, 724; pretreatment of pinto bean high protein fraction and time of blending corn meal affects extrudate properties, 1404; protease inhibitor effects on torsion measurements and autolysis of whiting surimi, 1050; protease inhibitors affect physical properties of flounder and pollock surimi, 96; purification of trypsin-like from crab, 780; sex determination on beef samples by PCR, 237; soybean flour lipoxygenase isozyme mutant effects on bread dough volatiles, 583; thermal inactivation kinetics of wheat germ lipoxygenase, 1095

essence
sorption of ethyl butyrate and octanal of orange by polymeric adsorbents, 801

ethanol
antibacterial effects and cell morphological changes in S. aureus subjected to low concentrations of, 435; purification of IgG from egg yolk by fractionation, 739

ethyl butyrate
sorption of orange essence by polymeric adsorbent, 801

ethylene
pigment changes in parsley during storage in -containing atmosphere, 616

evaporation
composition and sensory characterization of red raspberry juice concentrated, 633; concentration of liquid egg white by, 1017

extraction
fat and cholesterol content of beef affected by supercritical CO2, 950; milk fat fractionation with continuous countercurrent supercritical CO_2, 748; of carnosine, an antioxidant in beef muscle, 1; of cookie aroma compounds from aqueous and dough model system, 586; of lipid from catfish muscle: comparison of solvent systems, 84; of lipoxygenase in wheat germ, 1090; of metabolic phosphates in plants, 890; of tocopherol with application to quantitative analysis of lipophilic nutrients, 663; solid-phase acid improves TBA method to determine lipid oxidation, 921; supercritical CO_2 of carotene from sweet potatoes, 817; temperature and pH effects on oat gum and

glucan from oat bran and rolled oats, 562; triglyceride content of supercritical CO_2 fractions of beef fat, 1237

extrudate
enzyme pretreatment of pinto bean high protein fraction and time of blending corn meal affects, 1404; pasting of wheat flour containing conventional baking ingredients, 567

extruder
model for gelatinization of wheat starch in twin-screw, 872

extrusion
of defatted soy flour, corn starch and beef blends, 9; of pinto bean high protein fraction pretreated with papain and cellulase enzymes, 395; potato peel functional properties affected by conditions, 335; protein-protein interactions in soya at various temperatures and moisture contents, 378

F

failure deformation
of heated egg white gels, 113

fat
carbohydrate or protein based mimicker effects on ice milk properties, 761; concentration affects sweetness and sensory profile of sucrose, sucralose, and aspartame, 599; content of beef patties as affected by supercritical CO_2 extraction, 950; criterion for oil uptake during frying, 204; cure levels, processing methods and meat source effects frankfurters, 59; effect of trim on sensory attributes, cooking loss and composition of beef steaks, 242; high added water bologna from massaged minced batter, 259; level affects sensory, shear, cooking and composition of ground beef, 34; milk fractionation with continuous countercurrent supercritical CO2, 748; milk globule membrane substances inhibit mouse intestinal glucuronidase, 753; mobility of water in starch-based replacer by NMR, 1103; physical and sensory characteristics of ground beef, 461; pork affects bologna, 484; pork sausage stability in refrigerated storage with K lactate, 488; potassium lactate effects on sausage during retail distribution, 1245; salt, phosphate and oil temperature effects on emulsion capacity of sheep tail, 492; SEM evaluation of tortilla chip microstructure during frying, 199; sensory and textural characteristics of ham coated with emulsion of different levels of, 482; substituting olive oil for pork backfat affects quality of frankfurters, 705; triglyceride content of supercritical CO_2 extracted fractions of beef, 1237

fermentation
amino acids in wheat sourdough, 1324; changes in defatted peanut flour caused by fungal, 1318; chemometrics assess quality of breadmaking starters, 419; decrease of pungency in radish kimchi during, 128; effect on total nonprotein N and urea in milk, 548; germination and debittering lupin seeds reduce galactoside and intestinal carbohydrate in humans, 627; malic acid analysis in cucumber juice and brines in presence of interfering fructose, 832; maple syrup as carbohydrate source in sausage, 981; multiresponse optimization minimizes salt in cucumber, 1381; of green olives, 842

fertilization
zinc increases ascorbic acid and mineral contents of potatoes, 1375

fiber
binding of zinc to apple and wheat bran, 365; enzymetric-gravimetric method for total dietary in legumes compared with modified AOAC method, 929; resistant starch in foods: modified method for residues, 642

film
accumulation of chlorogenic acid in carrots during storage in oriented polypropylene, 840; corn coating from soy protein, 1086; hydrophilic edible: modified procedure for water vapor permeability and explanation of thickness effects, 899; permeability and mechanical properties of cellulose-based edible, 1361; polarity homogeneity and structure affect water vapor permeability of model edible, 426; suitability of plastic for modified atmosphere packaging of fruits and vegetables, 1365; temperature effect on oxygen permeability of edible protein-based, 212; water and glycerol as plasticizers affect mechanical and water vapor barrier properties of edible wheat gluten, 206; water vapor permeability of caseinate based edible affected by pH, Ca crosslinking and lipid content, 904

firmness
base-mediated retention of sweet potato products, 813; increased in strawberry slices under various storage conditions by vacuum infiltration of polyamines, 361; of canned grapefruit improved with Ca lactate, 1107; retention in pickled peppers as affected by $CaCl_2$, acetic acid and pasteurization, 325

fish
natural products inhibit oxidative rancidity in salted cooked ground, 318
See also individual species

fixation
staining for examining microstructure in whipped cream by electron microscopy, 124

flavor
color influences identification in fruit-flavored beverages, 810; constituents of aqueous fraction extracted from comte cheese by liquid CO_2, 1005; modifying characteristics of sweetener neohesperidin dihydrochalcone, 592; thermal stability of metabolically conjugated precursors of components in meat and milk, 292; volatile component in crab cooker effluent and concentrate, 525

flavoring
mutagen formation in beef processed by frying or microwave with use of, 1216

flounder
protease inhibitors affect physical properties of surimi, 96

flour
additives affect deoxynivalenol (vomitoxin) during breadbaking, 416; changes in defatted peanut caused by fungal fermentation and heat treatment, 1318; extrusion of defatted soy, 9; pasting of wheat extrudates containing conventional baking ingredients, 567; shelf-life, physical and sensory properties of high-protein products of defatted soy, 21; soy lipoxygenase isozyme mutant effects on bread dough volatiles, 583

fluid food
performance of helical screw rheometer for suspensions, 1172

fluorescence
in (E)-4,5-epoxy-(E)-2-heptenal/lysine model system, 667

fluorometry
peroxygenase assay for lipid hydroperoxides in meats and fish, 66

foaming
predicting protein functionality with neural networks, 1152

foie gras
lysozymes in eggs and plasma from chicken, duck and goose: choice and use of mAbs to detect adulterants, 1291

foil
delamination of aluminum layers of laminated packaging material by acetic acid, 215

formulation
ELISA determination of turkey roll endpoint temperature: effect of, 1258

fractal analysis
to characterize ruggedness changes in tapped agglomerated food powders, 1030

fractionation
rapid separation and measurment of particle size distribution of starch granules by sedimentation/steric field-flow, 1166

frankfurters
chlorine uptake by chicken immersed in chlorinated water, 987; cure levels, processing methods and meat source effects low-fat, 59; pollack and surimi as partial meat substitutes in: nitrosodimethylamine formation, 62; soy proteins functional and sensory characteristics improved in, 464; substituting olive oil for pork backfat affects quality of low-fat, 705; washed mechanically separated pork as a surimi-like meat-product ingredient, 254

freeze-drying
sorption behavior of sucrose/casein mixtures, 1162; volatile retention in microwave model foods, 1157

freeze/thaw
partial drying of cut pears to improve texture, 357

freezing
cryoprotectant effects during storage of chicken myofibrillar protein isolates, 274; enthalpy of foods determined by differential compensated calorimetry, 675; protein hydrolysis and quality deterioration of seafood due to bacteria, 310; reference materials for calibrating probes used for measuring thermal conductivity in food, 186; temperature affects sensory, shear, cooking and composition of ground beef, 34

freshness
evaluation in whitefish during chill storage, 1212

fructose
effect of temperature and aging on rheological changes during gelation of pectin dispersions, 173; malic acid analysis in cucumber juice and fermentation brines in presence of interfering, 832; rheology of structure development in pectin gels, 876

fruit
color influences flavor identification in flavored beverages, 810; stress relaxation of gels: evaluation of models and effects of composition, 1125; suitability of plastic films for modified atmosphere packaging of, 1365
See also individual species

frying
criterion for oil uptake during, 204; mutagen formation in burgers processed by with use of flavoring and browning agents, 1216; potato chips in canola and/or cottonseed oil maintain high quality, 1079; SEM evaluation of tortilla chip microstructure during, 199

fungi
volatiles from raspberry and strawberry inhibit postharvest decay, 793

G

galactoside, α-
germination and debittering lupin seeds reduce fermentation in humans, 627

gelatin
determining starch in dry starchy product, 888; rheological properties of mozzarella cheese filled with, 1001

gelatinization
model of wheat starch in twin-screw extruder, 872; of hydroxypropylated and cross-linked rices, 405

gelation
calcium induced of pre-heated whey protein isolate, 867; effect of temperature and aging on rheological changes during of pectin/fructose dispersions, 173; of myofibrillar protein isolated from beef heart under antioxidative conditions, 1241; of turkey breast and thigh myofibrils: changes during isolation of myofibrils, 983; of turkey myofibrils: effects of pH, salt and temperature, 727

gellan
Mg selectively isolated gum from dairy products, 539

gels
dynamic rheological properties and microstructure of partially insolubilized whey protein concentrate, 1047; failure deformation and stress relaxation of heated egg white, 113; forming properties of evaporated liquid egg white, 1013; linear programming and RSM to optimize surimi texture, 535; microcentrifuge based method for measuring water-holding of protein, 1040; microentrapment of lactobacilli in Ca alginate, 557; microwave heating of agar containing sucrose, 1426; point of whey and egg proteins using dynamic rheological data, 116; properties of acidic whey protein containing emulsified butterfat, 158; proton NMR and dielectric measurements on sucrose filled agar, 603; rheological relationship between surimi sol and as affected by ingredients, 880; rheology of structure development in pectin/fructose, 876; stress relaxation of fruit: evaluation of models and effects of composition, 1125; temperature mapping in model food using magnetic resonance imaging, 168; thermal conductivities of starch at high temperatures influenced by moisture, 884; viscoelastic properties of myofibrillar protein-polysaccharide composite, 164

gene probes
detection of Salmonella in oysters using, 1191

genistin
β-glucosidases from soybeans hydrolyze, 144

germination
of lupin seeds reduce galactoside and intestinal fermentation in humans, 627

ginger
antioxidant effects of constituents, 1407

glass-transition
glassy state in bacterial spores predicted by polymer theory, 445

glassy state
in bacterial spores predicted by polymer glass-transition theory, 445

glucan, β-
temperature and pH effects on extraction from oat bran and rolled oats, 562

gluconate
microbiological safety of cooked beef treated with, 953

glucosaminidase, N-acetyl-B-D-
end point temperature affects activity in beef, pork and turkey, 710

glucose
oxidase/catalase for control of shrimp microbial spoilage, 104; oxidase/catalase improves preservation of shrimp, 774

glucosidase, β-
from soybeans hydrolyze daidzin and genistin, 144

glucuronidase
milk fat globule membrane substance inhibit mouse intestinal, 753

glutamyl lysine
formation of cross-link in horse mackerel induced by drying, 1062; crosslink formation in sardine myofibril sol during setting, 785

gluten
water and glycerol as plasticizers affect mechanical and water vapor barrier properties of edible wheat film, 206

glycerol
as plasticizers affect mechanical and water vapor barrier properties of edible wheat gluten film, 206

goat
fatty acid composition of organ and muscle meat, 245

goose
lysozymes in eggs and plasma from: choice and use of mAbs to detect adulterants foie gras, 1291

grape
factors influencing ellagic acid precipitation in juice during storage, 193; yeast inhibition in juice containing SO_2, sorbic acid and dimethyldicarbonate, 1132

grapefruit
firmness of canned improved with Ca lactate, 1107

gravimetry
method for total dietary fiber in legumes compared with modified AOAC method, 929

grinding
microparticulation by jet mill of protein powders and effects on hydrophobicity, 1026

gums
Mg selectively isolates gellan from dairy products, 539; properties of algin/Ca and salt/phosphate structured beef rolls with added, 1224

H

hake
extra cold storage of, 1208

ham
nitrosobutylamine and other nitrosamines in cured meat packaged in rubber nettings, 47; porcine aminopeptidase activity as affected by curing agents, 724; sensory and textural characteristics coated with emulsions of different fat levels, 482; sensory property relationships to chemical data of Italian type dry cured, 968

heart
depression of water activity by soluble and insoluble solids in alginate restructured beef, 959; gelation of myofibrillar protein isolated from beef under antioxidative conditions, 1241

heat transfer
in composite food-theoretical analysis of influence of surface conductance and component arrangement, 1335

heating
changes in defatted peanut flour caused by fungal fermentation and, 1318; apple variations in response to, 1111; effect on total nonprotein N and urea in milk, 548; inactivation of native plasminogen activators in bovine milk, 1010; inactivation of trypsin inhibitors in soymilk at ultra high temperatures, 859; microwave of agar gels containing sucrose, 1426; mineral loss in cowpeas by pressure in water, 856; of pasteurized beef from precooked roasts, 5; reduces isopropyl N-(3-chlorophenyl)carbamate residue in potatoes, 132; toxic compounds formed in citrinin under watery conditions, 229

heptenal/lysine, (E)-4,5-epoxy-(E)-2-
nonenzymatic browning and fluorescence development in model system, 667

herring
thermal aggregation of myosin subfragments from, 1057

hexylresorcinol, 4-
as anti-browning agent in storage of apples, 797; potent inhibitor of mushroom tyrosinase, 609

hydration
lowering phytic phosphorus of soybeans by, 375; of medium: effects on Trichoderma viride, 1346

hydrocarbon
droplet size and emulsifier type affect water emulsions, 1148

hydrogen peroxide
malondialdehyde oxidation by in model systems, 925

hydrolysis
characteristics of mackerel mince lipid, 79; lactic fermentation of nontannin and high-tannin cereals: effects on estimation of iron availability and phytate, 408; of lipid related to astaxanthin content in muscle of frozen trout, 513; of protein and quality deterioration of refrigerated and frozen seafood due to bacteria, 310

hydroperoxide
fluorometric peroxygenase assay for in meats and fish, 66

hydrophobicity
microparticulation by jet mill grinding of protein powders and effects on, 1026

hydroxypropylation
gelatinization and retrogradation of rices, 405

I

ice cream
Mg selectively isolates gellan gum from, 539

ice milk
carbohydrate or protein based fat mimicker effects on properties, 761

IgG
antibody from egg yolk: purification by ethanol fractionation, 739

infant formula
soluble and lipid bound Ca and Zn during processing of milk, 756

ingredient
interaction effects on protein functionality: mixture design approach, 656

inhibitors
affect enzymic lipid peroxidation system of catfish muscle microsomes, 71; autolysis of squid muscle protein affected by, 1198; heat inactivation of trypsin in soymilk at ultra high temperature, 859; hexylresorcinol: effect on mushroom tyrosinase, 609; of protease affect physical properties of flounder and pollack surimi, 96

ionic strength
affects viscosity of actomyosin, 1269

iron
catalysis of lipid oxidation by from an insoluble fraction of beef muscle, 233; distribution in heated beef and chicken muscle, 697; lactic fermentation of non-tannin and high-tannin cereals: effects on estimation of availability of, 408; methods for determining nonheme in turkey meat, 288

irradiation
affects cell wall composition of strawberries, 182; affects microbial flora of pork, 717; affects nitrate-N concentrations of potatoes, (3)iv; affects physical properties of dry bean starch, 389; nonane as radiolytic product in bacon, 49

isopropyl N-(3-chlorophenyl)carbamate (CIPC)
moist and dry heat reduce residue in potatoes, 132

J

juice
anthocyanin of red raspberry: influences of cultivar, processing and environmental factors, 1135; composition and sensory characterization of red raspberry concentrated by direct osmosis or evaporation, 633; cross-flow microfiltration with gas backwash of apple, 638; enzymatic browning inhibited in apple rings by pineapple, 399; factors influencing ellagic acid precipitation in grape during storage, 193; malic acid analysis in cucumber brines in presence of interfering fructose, 832; optimization and modeling of apple cross-flow microfiltration with ceramic membrane, 369; optimization of carrot color and cloud stability, 1129; storage changes in anthocyanin content of raspberry concentrate, 190; yeast inhibition in grape containing SO_2, sorbic acid and dimethyldicarbonate, 1132

K

kale
absorbability of Ca from, 1378; assessing chemical form of Ca in, 605

kimchi
decrease of pungency in radish during fermentation, 128

kinetics
of C sporogenes spore destruction using computer-controlled thermoresistometer, 649; of deterioration of pineapple concentrate, 1411; thermal inactivation of wheat germ lipoxygenase, 1095

L

lactalbumin, α-
oil-soluble surfactants have little effect on adsorption of in emulsions, 295

lactate
microbiological safety of cooked beef treated with, 953

lactate dehydrogenase
denaturation during spray-drying of bovine plasma, 1021

Lactobacillus
fermentum JCM1173: conversion of metmyoglobin to myoglobin by, 38
from WA state wines: isolation and characterization, 453 microentrapment in Ca alginate gels, 557
salivarius: for conversion of soy molasses into lactic acid, 863

lactoglobulin, β-
oil-soluble surfactants have little effect on adsorption of in emulsions, 295

lactone, γ-
phase equilibria and distribution coefficients in supercritical CO2, 996

legumes
enzymetric-gravimetric method for total dietary fiber in compared with modified AOAC method, 929; pantothenic acid and biotin retention in cooked, 1084; trypsin inhibitor and tannin do not affect Ca bioavailability of, 382

lignin
formation of minimally processed carrot sticks, 1065

linear programming
to optimize surimi gel texture, 535

lipid
antioxidants, activators, and inhibitors affect peroxidation system of catfish muscle microsomes, 71; bound Ca and Zn during processing of infant milk formulas, 756; characteristics of mackerel mince hydrolysis, 79; display, packaging and meat block location effects on oxidation in beef, 1219; edible coating to inhibit migration in a confectionery product, 1422; extractoin from catfish muscle: comparison of solvent systems, 84; fluorometric peroxygenase assay for hydroperoxides in meats and fish, 66; hydrolysis and oxidation related to astaxanthin content in muscle of trout, 513; iron distribution in beef and chicken, 697; loss of oxidation products during thermal desorption in GC, 220; measuring oxidation volatiles in meats, 270; of amur fed different diets, 90; oxidation by iron from insoluble fraction of beef muscle, 233; oxidation in rabbit under storage conditions, 1262; oxygen availability affects prooxidant catalyzed oxidation of cooked turkey patties, 278; prevention of oxidation in turkey with hot packaging and antioxidant combinations, 283; solid- phase acid extraction improves TBA method to determine oxidation, 921; water vapor permeability of caseinate based edible films affected by, 904

lipoprotein
clarification of egg yolk suspensions and solubilization of proteins from, 307

lipoxygenase
optimizing assay and extraction in wheat germ, 1090; soy flour isozyme mutant effects on bread dough volatiles, 583; thermal inactivation kinetics of wheat germ, 1095

Listeria
innocua: packaging effects in shredded cabbage, 623
monocytogenes: in pork packaged under modified gas atmospheres, 475; on catfish cooked in microwave, 519; Pediococcus acidilactici bacteriocin production in whey permeate and inhibition of in foods, 430

lupin
germination and debittering seeds reduce galactoside and intestinal carbohydrate fermentation in humans, 627

lysozyme
egg white purification by UF and affinity chromatography, 303; in eggs and plasma from chicken, duck and goose: choice and use of mAbs to detect adulterants in foie gras, 1291

M

mackerel
characteristics of mince lipid hydrolysis, 79; extra cold storage of, 1208; formation of glutamyl-lysine induced by drying, 1062

magnesium
chloride, affected by ripening of camembert cheese, 1303
selectively isolates gellan gum from dairy products, 539

magnetic resonance imaging
temperature mapping in model food gel using, 168

malondialdehyde
oxidation by H_2O_2 and by light-excited riboflavin in model systems, 925

maple
syrup as carbohydrate source in dry sausage fermentation, 981

mapping
of temperature in model food gel using magnetic resonance imaging, 168

marbling
effects on sensory attributes, cooking loss and composition of beef steaks, 242

mass transfer
during processing of apples by combined methods, 1118

mathematics
relation between availability of minerals and food composition, 1349

maturity
effect on sensory evaluation of peaches, 177

maximum slope method
for evaluating thermal conductivity probe data, 1340

meat
fluorometric peroxygenase assay for lipid hydroperoxides in, 66; measuring lipid oxidation volatiles in, 270; thermal stability of metabolically conjugated precursors of flavor components in, 292
See also individual species

mechanical separation
pork as a surimi-like meat-product ingredient, 254

media
hydration effects on Trichoderma viride, 1346; microbial growth estimation in liquid exposed to temperature fluctuations, 644

melt point
of encapsulated Na bicarbonates: effect on refrigerated batter and muffins baked in conventional and microwaves, 574

melting
droplet size and emulsifier type affect hydrocarbon in water emulsions, 1148

membranes
prefiltration using formed-in-place metallic reduces microbial content of whey, 544

methods/methodology
aflatoxin contamination in nutmeg: analysis of interfering TLC spots, 197; allergenic reactivity of soybean products as determined by RAST inhibition, 385; amylose chain association based on DSC, 1332; assay and storage conditions affect yield of salt soluble protein from muscle, 963; assessing chemical form of Ca in wheat, spinach and kale, 605; browning during storage of apples preserved by combined: 4-hexylresorcinol as anti-browning agent, 797; browning potential of liquid smoke solutions, 671; chemometrics assess quality of breadmaking starters, 419; composition and sensory characterization of red raspberry juice concentrated by direct osmosis or evaporation, 633; concentration of liquid egg white by vacuum evaporation and RO, 1017; control of enzymatic browning in pre-peeled potatoes by surface digestion, 1076; detection of Salmonella in oysters using PCR and gene probes, 1191; egg white lysozyme purification by UF and affinity chromatography, 303; ELISA determination of turkey roll endpoint temperature: effects of formulation, storage and processing, 1258; enthalpy of frozen foods determined by differential compensated calorimetry, 675; enzymatic assay for ascorbic acid in food using peroxidase, 619; enzymetric-gravimetric for total dietary fiber in legumes compared with modified AOAC, 929; extraction and activity of carnosine in beef muscle, 1; extraction of cookie aroma compounds from aqueous and dough model system, 586; fixation staining for examining microstructure in whipped cream by electron microscopy, 124; fluorometric peroxygenase assay for lipid hydroperoxides in meats and fish, 66; for determining nonheme iron in turkey meat, 288; for soluble collagen in thermally processed meat products, 948; gel point of whey and egg proteins using dynamic rheological data, 116; glassy state in bacterial spores predicted by polymer glass-transition theory, 445; HPLC quantitation of alginate or pectin added to ground pork, 973; hydrophilic edible films: modified procedure for water vapor permeability and explanation of thickness effects, 899; IgG antibody from hen egg yolks: purification by ethanol fractionation, 739; ingredient interaction effects on protein functionality: mixture design approach, 656; intrinsic thermal conductivity of starch: a model-independent determination, 413; kinetics of C sporogenes spore destruction using computer-controlled thermoresistometer, 649; lipid extraction from catfish muscle: comparison of solvent systems, 84; loss of volatile lipid oxidation products during thermal desorption in dynamic headspace-capillary GC, 220; lysozymes in eggs and plasma from chicken, duck and goose: choice and use of mAbs to detect adulterants in foie gras, 1291; Mg selectively isolates gellan gum from dairy products, 539; malic acid analysis in cucumber juice and fermentation brines in presence of interfering fructose, 832; mass production for rice protein isolate and nutritional evaluation, 1393; mass transfer and textural changes during processing of apples, 1118; maximum slope for evaluating thermal conductivity probe data, 1340; measurement of food thermal conductivity using DSC, 1145; measurement of water activity above 100°C, 449; microbial growth estimation in liquid media exposed to temperature fluctuations, 644; microcentrifuge based for measuring water-holding of protein gels, 1040; microparticulation by jet mill grinding of protein powders and effects on hydrophobicity, 1026; multiresponse optimization minimizes salt in cucumber fermentation and storage, 1381; numerical and statistical to analyze spoilage of refrigerated solid foods exposed to temperature abuse, 914; of boning affects bind and sensory characteristics of beef, 1231; of processing effects low-fat frankfurters, 59; optimization and modeling of apple juice cross-flow microfiltration with a ceramic membrane, 369; optimizing processing conditions for chemical peeling of potatoes using RSM, 821; performance of helical screw rheometer for fluid food suspensions, 1172; permeability of porous food materials, 1329; phase equilibria and distribution coefficients of gamma-lactones in supercritical CO2, 996; polarity homogeneity and structure affect water vapor permeability of model edible films, 426; proton NMR and dielectric measurements on sucrose filled agar gels and starch pastes, 603; purification of antibodies from separated egg yolk, 1282; rapid separation and measurement of particle size distribution of starch granules by sedimentation/steric field-flow fractionation, 1166; reference materials for calibrating probes used for measuring thermal conductivity of frozen foods, 186; relationships between electromyography, sensory and instrumental measures of cheddar cheese texture, 1313; resistant starch in foods: modified for dietary fiber residues, 642; SEM evaluation of tortilla chip microstructure during deep-fat frying, 199; sex determination on samples of bovine meat by PCR, 237; solid food thermal conductivity determination at high temperatures, 908; solid-phase acid extraction improves thiobarbituric acid method to determine lipid oxidation, 921; temperature mapping in model food gel using magnetic resonance imaging, 168; tocopherol extraction with application to quantitative analysis of lipophilic nutrients, 663; validity of descriptive and defect-oriented terminology systems for sensory analysis of milk, 108; vitamin B_6 in raw and fried chicken by HPLC, 505; water absorption in chickpea and field pea using Peleg model, 848

metmyoglobin
conversion to myoglobin by Chromobacterium violaceum and Lactobacillus fermentum, 38; reductase: aging and processing affect beef muscle, 939

microbiology
aflatoxin contamination in nutmeg: analysis of interfering TLC spots, 197; antibacterial effects and cell morphological changes in S aureus subjected to low EtOH concentrations, 435; bacterial growth and volatile compounds in yogurt-type products from soymilk containing Bifidobacterium, 153; changes in defatted peanut flour caused by fungal fermentation and heat treatment, 1318; chemometrics assess quality of breadmaking starters, 419; comparison of models for bacterial spore population resources to sterilization temperatures, 223; conversion of metmyoglobin to myoglobin derivatives by Chromobacterium violaceum, Kurthia sp and Lactobacillus fermentum, 38; detection of Salmonella in oysters using PCR and gene probes, 1191; drying temperature and time affect quality of Chinese-style sausage inoculated with lactic acid bacteria, 249; fate of L monocytogenes and Aeromonas hydrophila on catfish cooked in microwave, 519; fermentation of green olives, 842; glassy state in bacterial spores predicted by polymer glass-transition theory, 445; glucose oxidase/catalase for control of shrimp spoilage, 104; growth estimation in liquid media exposed to temperature fluctuations, 644; internal temperature and packaging system affect stability of chicken during refrigerated storage, 265; irradiation and refrigerated storage affect flora of pork, 717; kinetics of C. sporogenes spore destruction using computer-controlled thermoresistometer, 649; lactic fermentation of non-tannin and high-tannin cereals: effects on estimation of iron availability and phytate hydrolysis, 408; Lactobacillus from WA state wines: isolation and characterization, 453; Lactobacillus salivarius for conversion of soy molasses into lactic acid, 863; medium hydration effects on growth of Trichoderma viride, 1346; microentrapment of lactobacilli in Ca alginate gels, 557; numerical and statistical methodology to analyze spoilage of refrigerated solid foods exposed to temperature abuse, 914; of beef packaged under modified atmosphere or vacuum, 935; packaging effects on L innocua in shredded cabbage, 623; Pediococcus acidilactici PO2 bacteriocin production in whey permeate and inhibitoin of Listeria monocytogenes in foods, 430; post-packaging pasteurization reduces C. perfringens and other bacteria in beef chunks, 239; prefiltration using formed-in-place metallic membranes reduces microbial content of whey, 544; properties of plain nonfat yogurt, 991; protein hydrolysis and quality deterioration of refrigerated and frozen seafood due to bacteria, 310; safety of cooked beef treated with lactate, monolaurin or gluconate, 953; sodium tripolyphosphate stability and effect in turkey, 501; survival and growth of L. monocytogenes and Y enterocolitica in pork packaged under modified gas atmospheres, 475; toxic compounds formed on prolonged heating of citrinin under watery conditions, 229; volatiles from raspberry and strawberry inhibit postharvest decay fungi, 793; yeast inhibition in grape juice containing SO_2, sorbic acid and dimethyldicarbonate, 1132

microcentrifuge
based method for measuring water-holding of protein gels, 1040

microfiltration
optimization and modeling of apple juice cross-flow with ceramic membrane, 369; with gas backwash of apple juice, 638

microparticulation
by jet mill grinding of protein powders and effects on hydrophobicity, 1026

microscopy, scanning electron
evaluation of tortilla chip microstructure during deep-fat frying, 199

microsomes
antioxidants, activators, and inhibitors affect lipid peroxidation system of catfish muscle, 71

microstructure
fixation staining for examining whipped cream by electron microscopy, 124; of partially insolubilized whey protein concentrate gels, 1047; SEM evaluation of tortilla chip during deep-fat frying, 199

microwave
fate of L monocytogenes and Aeromonas hydrophila on catfish cooked in, 519; heating of agar gels containing sucrose, 1426; melt point of encapsulated Na bicarbonates: effect on refrigerated batter and muffins baked in, 574; mutagen formation in beef burgers processed by with use of flavoring and browning agents, 1216; particle size of encapsulated Na bicarbonates: effect on batter and muffins baked in, 579; pericarp thickness and other kernel physical characteristics relate to popping quality of popcorn, 342; volatile retention in freeze-dried model foods, 1157

milk
carbohydrate or protein based fat mimicker effects on ice properties, 761; descriptive sensory profiling for optimizing formula of peanut-based coffee whitener, 120; digestibility of whey protein/casein complexes isolated from heated concentrated, 299; fat fractionation with continuous countercurrent supercritical CO_2, 748; fat globule membrane substances inhibit mouse intestinal glucuronidase, 753; heat and fermentation effects on total nonprotein N and urea in, 548; heat inactivation of native plasminogen activators in bovine, 1010; Mg selectively isolates gellan gum from, 539; rennet coagulability of high-heat treated influenced by time of pH adjustment, 1300; soluble and lipid bound Ca and Zn in infant formulas, 756; stability of dried filled, 1294; thermal stability of metabolically conjugated precursors of flavor components in, 292; validity of descriptive and defect-oriented terminology systems for sensory analysis of, 108; vanillin interaction with protein isolates in sweetened drinks, 1142; vitamin D stability in, 552

milkfat
droplet size and coalescence stability of whey protein stabilized peanut oil emulsions, 439

mineral
loss in cowpeas by pressure heating in water, 856; relation between availability of and food composition, 1349; zinc fertilization increases content of potatoes, 1375

mixture design
ingredient interaction effects on protein functionality, 656

mobility
of water in starch-based fat replacer by NMR, 1103

models/modeling
cholesterol autoxidation inhibition varies among natural antioxidants, 653; comparison of for bacterial spore population resources to sterilization temperatures, 223; extraction of cookie aroma compounds from aqueous and dough system, 586; for gelatinization of wheat starch in twin-screw extruder, 872; glucose oxidase/catalase solution for control of shrimp microbial spoilage, 104; heat and moisture transfer in composite food-theoretical analysis of influence of surface conductance and component arrangement, 1335; intrinsic thermal conductivity of starch, 413; malondialdehyde oxidation by H_2O_2 and by light-excited riboflavin, 925; maximum slope method for evaluating thermal conductivity probe data, 1340; microwave heating of agar gels containing sucrose, 1426; non- enzymatic browning and fluorescence development in (E)-4,5-epoxy-(E)-2-heptenal/lysine system, 667; of apple juice cross-flow microfiltration with ceramic membrane, 369; polarity homogeneity and structure affect water vapor permeability of edible films, 426; relation between availability of mineral and food composition, 1349; stress relaxation of fruit gels: evaluation of, 1125; temperature mapping in food gel using magnetic resonance imaging, 168; volatile retention in microwave freeze-dried foods, 1157; water absorption in chickpea and field pea using the Peleg, 848

moisture
affects reduced fat bologna, 484; protein-protein interactions in extrusion of soya at various contents, 378; rheological behavior of part-skim mozzarella cheese, 764; thermal conductivities of starch gels at high temperatures influenced by, 884; transfer in composite food: theoretical analysis of influence of surface conductance and component arrangement, 1335

molasses
Lactobacillus salivarius for conversion of soy into lactic acid, 863

Monascus ruber
production and food application of red pigment of, 1099

monoclonal antibodies (mAbs)
lysozymes in eggs and plasma from chicken, duck and goose: choice and use of to detect adulterants in foie gras, 1291

monolaurin
microbiological safety of cooked beef treated with, 953

muffins
melt point of encapsulated Na bicarbonates: effect on, 574; particle size of encapsulated Na bicarbonate: effect on, 579

muscle
aging and processing affect color, metmyoglobin reductase and oxygen consumption of beef, 939; antioxidants, activators, and inhibitors affect lipid peroxidation system of catfish microsomes, 71; assay and storage conditions affect yield of salt soluble protein from, 963; autolysis of squid protein affected by storage conditions and inhibitors, 1198; bovine tenderness as affected by postmortem aging time, animal sex and age, 713; catalysis of lipid oxidation by iron from an insoluble fraction of beef, 233; extraction and activity of carnosine in beef, 1; fatty acid composition of meat, 245; lipid extraction from catfish: comparison of solvent systems, 84; lipid hydrolysis and oxidation related to astaxanthin content in frozen trout, 513; myofibrillar proteins from cold-shortened and thaw-rigor beef, 720

mushroom
factors affecting 1-octen-3-ol at harvest and during postharvest storage, 331; hexylresorcinol, a potent inhibitor of tyrosinase, 609

mutagen
formation in beef processed by frying or microwave with use of flavoring and browning agents, 1216

mutton
surimi-like products from, 497

mycotoxin
additives affect deoxynivalenol (vomitoxin) during breadbaking, 416; formed on prolonged heating of citrinin under watery conditions, 229

myofibril
cryoprotectant effects during frozen storage of chicken protein isolates, 274; effect of pH, salt and temperature on gelation of turkey, 727; gelation of protein isolated from beef heart under antioxidative conditions, 1241; gelation of turkey breast and thigh: changes during isolation of, 983; glutamyl-lysine crosslink formation in sardine sol during setting, 785; proteins from cold-shortened and thaw-rigor beef, 720; setting response of pollock surimi compared with beef, 531; viscoelastic properties of protein-polysaccharide composite gels, 164

myoglobin
conversion of metmyoglobin to by Chromobacterium violaceum and Lactobacillus fermentum, 38

myosin
thermal aggregation of subfragments from cod and herring, 1057

N

Neohesperidin dihydrochalcone (NHDC)
flavor modifying characteristics of the intense sweetener, 592; stability in buffer solutions, 589

netting
nitrosobutylamine and other nitrosamines in cured meat packaged in rubber, 47

neural networks
predicting protein functionality with: foaming and emulsifying properties, 1152

nitrate
irradiation and packaging affect potatoes, (3)iv

nitrogen
irradiation and packaging affect potatoes, (3)iv; heat and fermentation effects on nonprotein in milk, 548

nitrosamine
in cured meat packaged in rubber nettings, 47

nitrosodibutylamine, n-
in cured meat packaged in rubber nettings, 47

nitrosodimethylamine, n-
pollack and surimi as partial meat substitutes in frankfurters: formation of, 62

nonane
radiolytic product in irradiated bacon, 49

nutmeg
aflatoxin contamination in: analysis of interfering TLC spots, 197

nutrition
mass production method for rice protein isolate and evaluation, 1393

O

oat
temperature and pH effects on gum and glucan extraction from bran and rolled, 562

octanal
sorption of orange essence by polymeric adsorbents, 801

1-octen-3-ol
factors affecting mushrooms at harvest and during postharvest storage, 331

oil
absorption of snack food from chickpea, 853; corn affects reduced fat bologna, 484; criterion for uptake during deep-fat frying, 204; drop-

let size and coalescence stability of whey protein stabilized milkfat peanut emulsions, 439; potato chips fried in canola and/or cottonseed maintain high quality, 1079; soluble surfactants have little effect on adsorption of lactabumin and lactoglobulin in emulsions, 295; substituting olive for pork backfat affects quality of low-fat frankfurters, 705; temperature effect on emulsion capacity of fresh or frozen meat and sheep tail fat, 492

olives
concentration of phenolic compounds change in storage brines of ripe, 347; fermentation of green, 842; substituting oil for pork backfat affects quality of low-fat frankfurters, 705

optimization
formula of peanut milk-based coffee whitener: descriptive sensory profiling for, 120; minimizes salt in cucumber fermentation and storage, 1381; of apple juice cross-flow microfiltration with ceramic membrane, 369; of carrot juice color and cloud stability, 1129; of lipoxygenase in wheat germ, 1090; of processing conditions for chemical peeling of potatoes using RSM, 821

orange
sorption of ethyl butyrate and octanal of essence by polymeric adsorbents, 801

osmosis, direct
composition and sensory characterization of red raspberry juice concentrated by, 633

oven
fate of L monocytogenes and Aeromonas hydrophila on catfish cooked in microwave, 519; melt point of encapsulated Na bicarbonates: effect on refrigerated batter and muffins baked in conventional and microwave, 574; particle size of encapsulated Na bicarbonates: effect on refrigerated batter and muffins baked in conventional and microwave, 579

oxidase
glucose for control of shrimp spoilage, 104; glucose improves preservation of shrimp, 774

oxidation
catalysis by iron from an insoluble fraction of beef muscle, 233; characteristics of mackerel mince lipid hydrolysis, 79; dietary α-tocopheryl acetate enhances beef quality in Holstein and beef breed steers, 28; display, packaging and meat block location effects on lipids in beef, 1219; iron distribution in beef and chicken, 697; loss of volatile lipid products during thermal desorption in GC, 220; measuring lipid volatiles in meats, 270; natural products inhibit rancidity in salted cooked ground fish, 318; nonenzymatic browning and fluorescence development in (E)-4,5-epoxy-(E)-2-heptenal/lysine model system, 667; of dihydrocapsaicin by Capsicum annuum peroxidase, 611; of lipid in rabbit under different storage conditions, 1262; of lipid related to astaxanthin content in muscle of frozen trout, 513; of malondialdehyde by H_2O_2 by and by light-excited riboflavin in model systems, 925; oxygen availability affects cooked turkey, 278; prevention in turkey with hot packaging and antioxidant combinations, 283; solid- phase acid extraction improves TBA method to determine lipid, 921; tocopherol and ascorbate delay oxymyoglobin and phospholipid, 1273

oxygen
aging and processing affect consumption of beef muscle, 939; availability affects prooxidant catalyzed lipid oxidation of cooked turkey patties, 278; temperature effect on permeability of edible protein-based films, 212

oxymyoglobin
tocopherol and ascorbate delay oxidation of, 1273

oysters
detection of Salmonella in using PCR and gene probes, 1191

P

packaging
affects ascorbic acid, enzyme activity and market quality of broccoli, 140; affects nitrate-N concentrations of potatoes, (3)iv; affects stability of chicken during refrigerated storage, 265; delamination of polyethylene and aluminum foil layers by acetic acid, 215; effect on color and lipid oxidation of beef, 1219; effects on L innocua in shredded cabbage, 623; L monocytogenes and Y enterocolitica in pork under modified gas atmosphers, 475; microbiology of fresh beef under modified atmosphere or vacuum, 935; modified atmosphere protects market quality under ambient temperature storage, 1070; nitrosobutylamine and other nitrosamines in cured meats in rubber nettings, 47; pasteurization reduces C perfringens in vacuum-packaged beef chunks, 239; prevention of lipid oxidation in turkey with hot, 283; storage changes of crab in different types of, 314; suitability of plastic films for fruits and vegetables, 1365

palm
sensory evaluation of hearts of, 134

papain
extrusion of pinto bean high protein fraction pretreated with, 395; inhibition in meat by potato protein or ascorbic acid, 1265

parsley
pigment changes in during storage in controlled or ethylene containing atmorsphere, 616

particle size
distribution of starch granules by sedimentation/steric field/flow fractionation, 1166; of encapsulated Na bicarbonates: effect on batter and muffins baked in conventional and microwave ovens, 579

pastes
proton NMR and dielectric measurements on sucrose filled agar gels and starch, 603

pasteurization
firmness retention in pickled peppers as affected by, 325; heating and texture of beef from precooked roasts, 5; post-packaging reduces C perfringens in vacuum-packaged beef chunks, 239

pasting
of wheat flour extrudates containing conventional baking ingredients, 567

pea, field
water absorption in using Peleg model, 848

peaches
effects of maturity, ripening and storage on sensory evaluation of, 177; organic acid changes during ripening of processing, 631

peanut
changes in defatted flour caused by fungal fermentation and heat treatment, 1318; descriptive sensory profiling for optimizing formula of milk-based coffee whitener, 120; droplet size and coalescence stability of whey protein stabilized milkfat oil emulsions, 439

pears
partial drying to improve freeze/thaw texture, 357

pectin
component analysis of disaggregation during plate module UF, 680; effect of temperature and aging on rheological changes during gelation of fructose dispersions, 173; HPLC quantitation of added to ground pork, 973; rheology of structure development in fructose gels, 876

Pediococcus acidilactici PO2
bacteriocin production in whey permeate and inhibition of L. monocytogenes in foods, 430

peeling
optimizing conditions for potatoes using RSM, 821

peppers
firmness retention in pickled as affected by $CaCl_2$, acetic acid, and pasteurization, 325

pericarp
thickness relates to microwave popping quality of popcorn, 342

permeability
hydrophilic edible films: procedure for water vapor, 899; of caseinate based edible films affected by pH, Ca crosslinking and lipid content, 904; of cellulose-based edible films, 1361; of oxygen: temperature effect on edible protein-based films, 212; of porous food materials, 1329; polarity homogeneity and structure affect water vapor of edible films, 426

peroxidase
assay for ascorbic acid in food using, 619; dihydrocapsaicin oxidation by Capsicum annuum, 611

peroxidation
antioxidants, activators, and inhibitors affect catfish muscle microsomes, 71

peroxygenase
fluorometric assay for lipid hydroperoxides in meats and fish, 66

persimmon
temperature affects astringency removal and recurrence in, 1397

pH
affects viscosity of actomyosin, 1269; ascorbate absorption as function of, 75; effect on gelation of turkey myofibrils, 727; effect on oat gum and glucan extraction from oat bran and rolled oats, 562; rennet coagulability of high-heat treated milk influenced by time of adjustment, 1300; water vapor permeability of caseinate based edible films affected by, 904

phase equilibrium
of gamma-lactones in supercritical CO_2, 996

phenol
changes in content in shredded carrots during storage, 351; concentration of compounds change in storage brines of ripe olives, 347

phosphate
cryostabilization of functional properties of pre- and post-rigor beef by, 467; effects on emulsion capacity of fresh or frozen meat and sheep tail fat, 492; extraction and analysis in plants, 890; properties of / salt structured beef rolls with added gums, 1224

phospholipid
tocopherol and ascorbate delay oxidation of, 1273

phosphorus
lowering by hydration of soybeans, 375

phytate
lactic fermentation of non-tannin and high-tannin cereals: effects on estimation of hydrolysis of, 408; lowering phosphorus by hydration of soybeans, 375

pickling
firmness retention in peppers as affected by $CaCl_2$, acetic acid and pasteurization, 325

pigment
changes in parsley during storage in controlled or ethylene containing atmosphere, 616; production and food application of Monascus ruber, 1099; spectra responsible for pink color in pork cooked to 65 or 82°C, 51; stability of saffron in aqueous extracts, 1073

pineapple
enzymatic browning inhibited in apple rings by juice, 399; kinetics of deterioration, 1411

plants
extraction and analysis of metabolic phosphates in, 890

plasma
cholesterol content and functionality of from egg yolk, 1277; denaturation of lactate dehydrogenase during spray-drying of bovine, 1021; lysozymes in from chicken, duck and goose: choice and use of mAbs to detect adulterants in foie gras, 1291

plasminogen
heat inactivation of activators in bovine milk, 1010

plastic
suitability of films for modified atmosphere packaging of fruits and vegetables, 1365

plasticizer
water and glycerol affect mechanical and water vapor barrier properties of edible wheat gluten film, 206

polarity
homogeneity affects water vapor permeability of model edible films, 426

pollack (Theragra chalcogramma)
as meat substitutes in frankfurters: nitrosodimethylamine formation, 62; protease inhibitors affect physical properties of surimi, 96; setting response of surimi compared with beef myofibrils, 531

polyamines
vacuum infiltration of increases firmness of strawberry slices under various storage conditions, 361

polyethylene
delamination of layers of laminated packaging material by acetic acid, 215

polymerase chain reaction (PCR)
detection of Salmonella in oysters using, 1191; sex determination on beef samples by, 237

polymerization
of beef actomyosin induced by transglutaminase, 473

polypropylene
accumulation of chlorogenic acid in carrots during storage in film, 840

polysaccharide
viscoelastic properties of myofibrillar protein composite gels, 164

popcorn
pericarp thickness and other kernel physical characteristics relate to microwave popping quality of, 342

popping
pericarp thickness and other kernel physical characteristics relate to microwave quality of popcorn, 342

porcine somatotropin (pSt)
consumer evaluation of pork from pigs administered, 480

pork
acceptability and shelf-life of marinated fresh and precooked, 1249; acid/base status of stress susceptible pigs affects sensory quality of roasts, 1254; aminopeptidase activiy as affected by curing agents, 724; consumer evaluation of from pigs administered pSt, 480; end point temperature affects glucosaminidase activity in, 710; fat affects reduced fat bologna, 484; HPLC quantitation of alginate or pectin added to ground, 973; irradiation and refrigerated storage affect microbial flora of, 717; L monocytogenes and Y enterocolitica in packaged under modified gas atmospheres, 475; low-fat sausage stability in refrigerated storage with K lactate, 488; sodium lactate/NaCl effects on sensory characteristics and shelf-life of, 978; spectra of pigments responsible for pink color in cooked, 51; substituting olive oil for backfat affect low-fat frankfurters, 705; utilization of surimi-like products from in restructured roast, 53; washed mechanically separated as surimi-like meat-product ingredient, 254

porosity
permeability of food materials, 1329

potassium lactate
effects on low fat pork sausage during retail distribution, 1245; low-fat pork sausage stability in refrigerated storage with, 488

potatoes
chips: fried in canola and/or cottonseed oil maintain high quality, 1079
cube response to water blanching and high hydrostatic pressure, 1371
diffusion in heated tissues, 827
irradiation and packaging affect nitrate-N concentrations of, (3)iv
moist and dry heat reduce isopropyl N-(3-chlorophenyl) carbamate (CIPC) residue in, 132
optimizing processing conditions for chemical peeling using RSM, 821
peel functional properties affected by extrusion conditions, 335
sweet: base-mediated firmness retention of products, 813; determining gelatinized starch in dry starchy product, 888; supercritical CO_2 extraction of carotene from, 817
zinc fertilization increases ascorbic acid and mineral content of, 1375

powder
fractal analysis to characterize ruggedness changes in tapped food, 1030; microparticulation by jet mill grinding of protein and effects on hydrophobicity, 1026; NMR study of cholesterol autooxidation in egg and cookies exposed to adverse storage, 1286

prefiltration
using formed-in-place metallic membranes reduces microbial content of whey, 544

preservation
glucose oxidase/catalase improves shrimp, 774

pressure
mineral loss in cowpeas by heating in water, 856; potato cube response to high hydrostatic, 1371

processing
affects color, metmyoglobin and oxygen consumption of beef muscles, 939; anthocyanin of red raspberry juice: influences of, 1135; base-mediated firmness retention of sweet potato products, 813; crabcake from crab by- products: development and sensory evaluation, 99; effects low-fat frankfurters, 59; ELISA determination of turkey roll endpoint temperature: effects of, 1258; lignin formation and surface discoloration of carrot sticks, 1065; mass transfer and textural changes in apples during, 1118; mutagen formation in beef by frying or microwave with use of flavoring and browning agents, 1216; optimizing conditions for chemical peeling of potatoes using RSM, 821; organic acid changes during ripening of peaches, 631; quality of apple slices, 1115; soluble and lipid bound Ca and Zn in infant milk formulas, 756; temperature-dependent of food deterioration, (6)iv; thermal: potato cubes response to water blanching and high hydrostatic pressure, 1371; thermal: procedure for soluble collagen in meat products, 948; thermal: apple variations in response to minimal, 1111; volatiles in crab and by-product, 1203

protease
inhibitor effects on torsion measurements and autolysis of whiting surimi, 1050; inhibitors affect physical properties of flounder and pollock surimi, 96

protein
assay and storage conditions affect yield from muscle, 963; autolysis of squid muscle affected by storage conditions and inhibitors, 1198; based fat mimicker effects on ice milk properties, 761; calcium induced gelation of pre- heated whey isolate, 867; clarification of egg yolk suspensions and solubilization of from lipoproteins, 307; composition and structural characteristics of soy from broken and damaged seeds, 148; concentration, pH and ionic strength affect viscosity of actomyosin, 1269; cryoprotectant effects during frozen storage of chicken myofibrillar isolates, 274; denaturation of whiting fillets, 1055; digestibility of whey/casein complexes isolated from heated concentrated milk, 299; disulfide bond formation affects stability of whey isolate emulsions, 1036; droplet size and coalescence stability of protein stabilized milkfat peanut oil emulsions, 439; dynamic properties and microstructure of partially insolubilized whey concentrate gels, 1047; edible films and coating from soy, 1086; enzyme pretreatment of pinto bean and time of blending corn meal affects extrudate properties, 1404; extrusion of pinto bean fraction pretreated with papain and cellulase, 395; gelation of myofibrillar isolated from beef heart, 1241; gel point of egg using dynamic rheological data, 116; hydrolysis and quality deterioration of refrigerated and frozen seafood due to bacteria, 310; ingredient interaction effects on functionality: mixture design approach, 656; inhibition of papain in meat by potato, 1265; interactions in extrusion of soya at various temperatures and moisture contents, 378; mass production method for rice isolate and nutritional evaluation, 1393; microcentrifuge based method for measuring water-holding of gels,

1040; microparticulation by jet mill grinding of powders and effects on hydrophobicity, 1026; myofibrillar from cold-shortened and thaw-rigor beef, 720; predicting functionality with neural networks: foaming and emulsifying properties, 1152; products of defatted soy flour, corn starch and beef: shelf-life, physical and sensory properties, 21; properties of acidic whey gels containing emulsified butterfat, 158; rheological properties of mozzarella cheese filled with soy, 1001; soy functional and sensory characteristics improved in comminuted meat, 464; temperature effect on oxygen permeability of edible-based films, 212; vanillin interaction with milk isolates in sweetened drinks, 1142; viscoelastic properties of myofibrillar polysaccharide composite gels, 164

pungency
decrease in radish kimchi during fermentation, 128

purification
of antibodies from separated egg yolk, 1282; of egg white lysozyme by UF and affinity chromatography, 303; of IgG from egg yolk by ethanol fractionation, 739; of trypsin-like enzyme from crab, 780

Q

quality
acid/base status of stress susceptible pigs affects sensory evaluation of roasts, 1254; chemometrics assess breadmaking starters, 419; deterioration of refreigerated and frozen seafood due to bacteria, 310; dietary α- tocopheryl acetate enhancement in Holstein and beef breed steers, 28; drying temperature and time affect on Chinese-style sausage inoculated with lactic acid bacteria, 249; modified atmosphere packaging affects broccoli, 140; modified atmosphere packaging protects broccoli under ambient temperature storage, 1070; of apple slices, 1115; of flesh in snapper affected by capture stress, 770; pericarp thickness and other kernel physical characteristics relate to microwave popping of popcorn, 342; potato chips fried in canola and /or cottonseed oil maintain high, 1079; preemulsified oil, pork fat, or added moisture affect reduced fat bologna, 484; storage conditions affect raisins, 805; substituting olive oil for pork backfat affect low-fat frankfurters, 705

S

rabbit
lipid oxidation under different storage conditions, 1262

radish
decrease of pungency in kimchi during fermentation, 128

raisins
storage condition affect quality of, 805

rancidity
natural products inhibit oxidation in salted cooked ground fish, 318

raspberry
composition and sensory characterization of juice concentrated by direct osmosis or evaporation, 633; red: anthocyanin of juice: influences of cultivar, processing, and environmental factors, 1135 storage changes in anthocyanin content of juice concentrate, 190; volatiles inhibit postharvest decay fungi, 793

RAST inhibition
allergenic reactivity of soybean products as determined by, 385

refrigeration
affects microbial flora of pork, 717; internal temperature and packaging system affect stability of chicken during, 265; low-fat pork sausage stability in storage with K lactate, 488; numerical and statistical methods to analyze spoilage of solid foods exposed to temperature abuse, 914; protein hydrolysis and quality deterioration of seafood due to bacteria, 310

relaxation
of heated egg white gels, 113; of stress in fruit gels: evaluation of models and effects of composition, 1125

rennet
coagulability of high-heat treated milk influenced by time of pH adjustment, 1300

residue
moist and dry heat reduce CIPC in potatoes, 132

response surface methodology (RSM)
multiresponse optimization minimizes salt in cucumber fermentation and storage, 1381; optimizing processing conditions for chemical peeling of potatoes using, 821; protein concentration, pH and ionic strength affect apparent viscosity of actomyosin, 1269; to optimize surimi gel texture, 535

retailing
display, packaging and meat block location effects on color and lipid oxidation of beef, 1219; potassium lactate effects on low fat sausage during, 1245; sensory characteristics of freshwater fish, 508; vitamin E enhances color and display life of beef from Holstein steers, 701

retrogradation
of hydroxypropylated and cross-linked rices, 405

reverse osmosis
concentration of liquid egg white by, 1017

rheology
behavior of frozen and thawed low-moisture part skim mozzarella cheese, 764; changes during gelation of high-methoxyl pectin/fructose dispersions: effect of temperature and aging, 173; dynamic properties and microstructure of partially insolubilized whey protein concentrate gels, 1047; failure deformation and stress relaxation of heated egg white gels, 113; gel point of whey and egg proteins using dynamic data, 116; of dried squid mantle on softening, 321; of mozzarella cheese filled with dairy, egg, soy proteins and gelatin, 1001; of structure development in pectin/fructose gels, 876; properties of acidic whey protein gels containing emulsified butterfat, 158; relationships between surimi sol and gel as affected by ingredients, 880

rheometer
performance of helical screw for fluid food suspensions, 1172

riboflavin
malondialdehyde oxidation by light-excited in model systems, 925

rice
gelatinization and retrogradation characteristics of hydroxypropylated and cross-linked, 405; mass production method for protein isolate and nutritional evaluation, 1393

ripening
effect on sensory evaluation of peaches, 177; organic acid changes during processing of peaches, 631; sodium chloride and magnesium chloride affected by of camembert cheese, 1303

rubber
nitrosobutylamine and other nitrosamines in cured meats packaged in netting, 47

ruggedness
fractal analysis to characterize changes in tapped agglomerated food powders, 1030

S

saffron
stability of pigments in aqueous extracts, 1073

Salmonella
detection in oysters using PCR and gene probes, 1191

salt
assay and storage conditions affect yield of soluble protein from muscle, 963; effect on gelation of turkey myofibrils, 727; effects on emulsion capacity of fresh or frozen meat and sheep tail fat, 492; multiresponse optimization minimizes in cucumber fermentation and storage, 1381; properties of /phosphate structured beef rolls with added gums, 1224

sardine
glutamyl-lysine crosslink formation in myofibril sol during setting, 785

sausage
drying temperature and time affect quality on Chinese-style, 249; low-fat pork stability in refrigerated storage with K lactate, 488; maple syrup as carbohydrate source in fermentation, 981; potassium lactate effects on low fat during retail distribution, 1245

seafood
antioxidants, activators, and inhibitors affect enzymic lipid peroxidation system of catfish muscle microsomes, 71; ascorbate absorption by catfish as function of ascorbate concentration, pH, and duration of exposure, 75; autolysis of squid muscle protein as affected by storage conditions and inhibitors, 1198; characteristics of mackerel mince lipid hydrolysis, 79; crabcake from crab processing by-products: development and sensory evaluation, 99; detection of Salmonella in oysters using PCR and gene probes, 1191; extra cold storage of hake and mackerel fillets and mince, 1208; fate of L monocytogenes and Aeromonas hydrophila on catfish cooked in microwave, 519; fatty acid composition, lipids, and sensory characteristics of amur fed different diets, 90; flesh quality in snapper affected by capture stress, 770; fluorometric peroxygenase assay for lipid hydroperoxides in, 66; formulation of glutamyl-lysine cross-link in cured horse mackerel induced by drying, 1062; freshness evaluation in whitefish during chill storage, 1212; glucose oxidase/catalase improves preservation of shrimp, 774; glucose oxidase/catalase solution for on-board control of shrimp microbial spoilage: model studies, 104; glutamyl-lysine crosslink formation in sardine myofibril sol during setting, 785; lipid extraction from catfish muscle: comparison of solvent systems, 84; lipid hydrolysis and oxidation related to astaxanthin content in muscle of frozen trout, 513; natural products inhibit oxidative rancidity in salted cooked ground fish, 318; pollack and surimi as partial meat substitutes in frankfurters: nitrosodimethylamine formation, 62; protease inhibitor effects on torsion measurements and autolysis of whiting surimi, 1050; protease inhibitors affect physical properties of flounder and

pollock surimi, 96; protein denaturation of frozen whiting fillets", 1055; protein hydrolysis and quality deterioration of refrigerated and frozen due to bactera, 310; rheological properties of dried squid mantle change on softening, 321; sensory characteristics of freshwater fish in retail distribution, 508; setting reponse of pollock surimi compared with beef myofibrils, 531; specific heat of selected fresh, 522; storage changes of crab in different types of packaging, 314; thermal aggregation of myosin subfragments from cod and herring, 1057; trypin-like enyzme from crab: purification and characterization, 780; utilization of surimi-like products from pork with sex-odor in restructured, precooked pork roast, 53; volatile components in crab and processing by-product, 1203; volatile flavor componenet in crab cooker effluent and concentrate, 525

sedimentation
separation and measurement of particle size distribution of starch granules by field-flow fractionation, 1166

selenium
content in bison, elk and mule deer, 731

sensory evaluation
acceptability and shelf-life of pork, 1249; acid/base status of stress susceptible pigs affects quality of roasts, 1254; boning methods and binders affect structured beef, 1231; bovine longissimus muscle tenderness as affected by postmortem aging time, animal age and sex, 713; carbonated water lexicon: temperature and CO_2 influence on descriptive rating, 893; color influences flavor identification in fruit-flavored beverages, 810; consumer evaluation of pork from pigs administered pSt, 480; fat concentration affects sucrose, sucralose and aspartame, 599; fat level and freezing temperature affect ground beef, 34; firmness of canned grapefruit improved with Ca lactate, 1107; firmness retention in pickled peppers as affected by $CaCl_2$, acetic acid, and pasteurization, 325; flavor modifying characteristics of sweetener neohesperidin dihydrochalcone, 592; flesh quality of snapper affected by capture stress, 770; freshness evaluation in whitefish during chill storage, 1212; gluconic acid influences texture and color of canned asparagus, 614; marbling, fat trim and doneness effects on beef steaks, 242; mass transfer and textural changes during processing of apples, 1118; measure of cheddar cheese texture, 1313; of amur fed different diets, 90; of crabcake from crab processing by-products, 99; of freshwater fish in retail distribution, 508; of ham coated with emulsions of different fat levels, 482; of hearts of palm, 134; of high-protein products of defatted soy flour, corn starch and beef, 21; of low fat ground beef, 461; of peaches: maturity, ripening and storage effects, 177; of plain nonfat yogurt, 991; of red raspberry juice concentrated by direct osmosis or evaporation, 633; of snack food from chickpea, 853; panelist texture preferences affect green bean cultivars, 139; partial drying of cut pears to improve freeze/thaw texture, 357; potato chips fried in canola and /or cottonseed oil maintain high quality, 1079; production and food application of red pigment of Monascus ruber, 1099; profiling for optimizing formula of peanut milk-based liquid coffee whitener, 120; relationship to chemical data of Italian type dry cured ham, 968; sodium lactate/NaCl effects on pork, 978; storage changes of crab in different types of packaging, 314; substituting olive oil for pork backfat affects low-fat frankfurters, 705; sweetness adaptation of carbohydrate and high potency sweeteners, 595; time-intensity methodology for beef tenderness perception, 943; time-intensity parameters of carbohydrate and high potency sweeteners, 1418; utilization of surimi-like products from pork with sex-odor in restructured roast, 53; validity of descriptive and defect-oriented terminology systems for analysis of milk, 108

setting response
of pollock surimi compared with beef myofibrils, 531

sex
determination on beef samples by PCR; 237

sex-odor
utilization of surimi-like products from pork with in restructured roast, 53

shear
fat level and freezing temperature affect ground beef, 34

sheep
salt, phosphate and oil temperature effects on emulsion capacity of tail fat, 492; surimi-like products from mutton, 497

shrimp
glucose oxidase/catalase for control of microbial spoilage, 104; glucose oxidase/catalase improves preservation of, 774

sialyloligosaccharide
of delipidated egg yolk fraction, 743

slicing
waterjet effect on white tissue development of carrot sticks, 1390

smoke
browning potential of liquid solutions: comparison of methods, 671

snack food
oil absorption and sensory properties of from chickpea, 853

snapper
flesh quality affected by capture stress, 770

sodium bicarbonate
melt point of encapsulated: effect on refrigerated batter and muffins baked in conventioanl and microwave ovens, 574; particle size of encapsulated: effect on batter and muffins baked in conventional and microwave ovens, 579

sodium chloride
affected by ripening of camembert cheese, 1303; effect on sensory characteristics and shelf-life of pork, 978; treatment effect on white tissue development of carrot sticks, 1390

sodium lactate
effect on sensory characteristics and shelf-life of pork, 978

sodium tripolyphosphate
stability and effect in turkey, 501

softening
rheological properties of squid change on, 321

solvent
comparison of systems for lipid extraction from catfish, 84

somatotropin, porcine (pSt)
consumer evaluation of pork from pigs administered, 480

sorption
of ethyl butyrate and octanal of orange essence by polymeric adsorbents, 801; of mechanically mixed and freeze-dried sucrose/casein mixtures, 1162

soy/soybeans
allergenic reactivity of products as determined by RAST inhibition, 385; composition and structural characteristics of proteins from broken and damaged seeds, 148; edible films and coating from, 1086; extrusion of defatted flour, 9; flour lipoxygenase isozyme mutant effects on bread dough volatiles, 583; β-glucosidases from hydrolyze daidzin and genistin, 144; Lactobacillus salivarius for converions of molasses into lactic acid, 863; lowering phytic phosphorus by hydration of, 375; protein-protein interactions in extrusion at various temperatures and moisture content, 378; proteins functional and sensory characteristics improved in comminuted meats, 464; rheological properties of mozzarella cheese filled with, 1001; shelf-life, physical and sensory properties of high-protein products of defatted flour, 21

soymilk
bacterial growth and volatiles in yogurt-type products from containing Bifidobacterium, 153; heat inactivation of trypsin inhibitors at ultra high temperatures, 859

specific heat
of selected fresh seafood, 522

spectrophotometry
spectra of pigments responsible for pink color in pork cooked to 65 or 82°C, 51

spectroscopy
mass:anthocyanin from Tradescantia pallida, 1068
nuclear magnetic resonance: mobility of water in starch-based fat replacer by, 1103; of cholesterol autooxidation in egg powder and cookies exposed to adverse storage, 1286; on sucrose filled agar gels and starch pastes, 603

spinach
assessing chemical form of Ca in, 605

spoilage
glucose oxidase/catalase for control of shrimp microbial, 104; numerical and statistical methods to analyze refrigerated solid foods exposed to temperature abuse, 914

spray-drying
denaturation of lactate dehydrogenase during of bovine plasma, 1021

squid
autolysis of muscle protein affected by storage conditions and inhibitors, 1198; rheological properties change on softening, 321; specific heat of, 522

stability
bond formation affects whey protein isolate emulsions, 1036; droplet size and coalescence of whey protein stabilized milkfat peanut oil emulsions, 439; internal temperature and packaging affects chicken during refrigerated storage, 265; of dried filled milks, 1294; of low-fat pork sausage in refrigerated storage with K lactate, 488; of neohesperidin dihydrochalcone in buffer solutions, 589; of saffron pigments in aqueous extracts, 1073; of vitamin D in milk, 552; optimization of c rrot juice color and cloud, 1129; sodium tripolyphosphate effect in turkey, 501

staining
for examining microstructure in whipped cream by electron microscopy, 124

Staphylococcus aureus
antibacterial effects and cell morphological changes in subjected to low EtOH concentrations, 435

starch
determining gelatinized in dry product, 888; extrusion of corn, 9; intrinsic thermal conductivity of: a model-independent determination, 413; irradiation affects physical properties of dry bean, 389; mobility of water in -based fat replacer by NMR, 1103; model for gelatinization of wheat in twin-screw extruder, 872; proton NMR and dielectric measurements on sucrose filled agar gels and pastes, 603; resistant in foods: modified method for dietary fiber residues, 642; separation and measurement of particle size distribution of granules by sedimentation/steric field-flow fractionation, 1166; shelf-life, physical and sensory properties of high-protein products of corn, 21; thermal conductivities of gels at high temperatures influenced by moisture, 884

statistics
method to analyze spoilage of refrigerated solid foods exposed to temperature abuse, 914

sterilization
comparison of models for bacterial spore population resources to temperatures, 223

storage
accumulation of chlorogenic acid in carrots in polypropylene film, 840; affects chemical characteristics of omega-3 fatty acid enriched chicken, 43; affects microbial flora of pork, 717; affects quality of raisins, 805; affects yield of salt soluble protein from muscle, 963; autolysis of squid muscle protein affected by, 1198; browning of apples preserved by combined methods: 4-hexylresorcinol as anti-browning agent, 797; changes in anthocyanin content of raspberry juice concentrate, 190; changes in crab in different types of packaging, 314; changes in phenolic content in shredded carrots during, 351; concentration of phenolic compounds change in brines of ripe olives, 347; cryoprotectant effects during freezing of chicken myofibrillar protein isolates, 274; cryostabilization of functional properties of pre-rigor and post-rigor beef by dextrose polymer and/or phosphates, 467; dietary vitamin E enhances color and display life of beef from Holstein steers, 701; effect on sensory evaluation of peaches, 177; ELISA determination of turkey roll endpoint temperature: effects of, 1258; factors affecting 1-octen-3-ol in mushrooms at harvest and during postharvest, 331; factors influencing ellagic acid precipitation in grape juice during, 193; freshness evaluation in whitefish during chill storage, 1212; glucose oxidase/catalase improves preservation of shrimp, 774; internal temperature and packaging system affect stability of chicken during, 265; lipid hydrolysis and oxidation related to astaxanthin content in muscle of frozen trout, 513; lipid oxidation in rabbit under different conditions, 1262; low-fat pork sausage stability in refrigeration with K lactate, 488; modified atmosphere packaging protects market quality in broccoli, 1070; multiresponse optimization minimizes salt in cucumber, 1381; NMR study of cholesterol autooxidation in egg powder and cookies exposed to adverse, 1286; of hake and mackerel fillets and mince, 1208; of high-protein texturized products of defatted soy flour, corn starch and beef, 21; of marinated fresh and precooked pork, 1249; optimal controlled atmosphere conditions for broccoli, 338; pigment changes in parsley in controlled or ethylene containing atmosphere, 616; sodium lactate/NaCl effects on sensory characteristics and shelf-life of pork, 978; vacuum infiltration of polyamines increases firmness of strawberry slices, 361

strain
stress relationships of two puffed cereals, 1356

strawberries
formation of anthocyanins from cells cultured from, 788; radiation affects cell wall composition of, 182; vacuum infiltration of polyamines increases firmness of slices under various storage conditions, 361; volatiles inhibit postharvest decay fungi, 793

stress
acid/base status affects sensory quality of roasts, 1254; flesh quality of snapper affected by capture, 770; relaxation of fruit gels: evaluation of models and effects of composition, 1125; relaxation of heated egg white gels, 113; strain relationships of two puffed cereals, 1356

sucralose
fat concentration affects sweetness and sensory profile of, 599

sucrose
fat concentration affects sweetness and sensory profile of, 599; microwave heating of agar gels containing, 1426; proton NMR and dielectric measurements on filled agar gels and starch pastes, 603; sorption behavior of mechanically mixed and freeze-dried casein mixtures, 1162

sulfur
formed in disrupted tissues of cabbage, 835

sulfur dioxide
yeast inhibition in grape juice containing, 1132

surface conductance
heat and moisture transfer in composite food: theoretical analysis of influence of, 1335

surfactants
have little effect on adsorption of lactalbumin and lactoglobulin in emulsions, 295

surimi
as meat substitutes in frankfurters: nitrosodimethylamine formation, 62; linear programming and RSM to optimize gel texture, 535; products from mutton, 497; protease inhibitor effects on torsion measurements and autolysis of whiting, 1050; protease inhibitors affect physical properties of flounder and pollock, 96; rheological relationship between sol and gel as affected by ingredients, 880; setting response of pollock compared with beef myofibrils, 531; utilization of -like products from pork in restructured pork roast, 53; washed mechanically separated pork as meat product ingredient, 254

suspensions
performance of helical screw rheometer for fluid food, 1172

sweetener
flavor modifying characteristics of neohesperidin dihydrochalcone, 592; sweetness adaptation of carbohydrate and high potency, 595; time-intensity parameters of, 1418

sweetness
adaptation of carbohydrate and high potency sweeteners, 595; fat concentration affects sucrose, sucralose and aspartame, 599

syrup
maple as carbohydrate source in dry sausage fermentation, 981

T

tannin
does not affect Ca bioavailability of legumes, 382; lactic fermentation of cereals: effects on estimation of Fe availability and phytate hydrolysis, 408

tapioca
determining gelatinized starch in dry starchy product, 888

temperature
affects N-acetyl-B-D-glucosaminidase activity in beef, pork and turkey, 710; affects astringency removal and recurrence in persimmon, 1397; affects stability of chicken during refrigerated storage, 265; carbonated water lexicon: influence on descriptive ratings, 893; comparison of models for bacterial spore population resources to sterilization, 223; dependence of food deterioration processes, (6)iv; effect on oat gum and glucan extraction from oat bran and rolled oats, 562; effect on oxygen permeability of edible protein-based films, 212; effect on rheological changes during gelation of high-methoxyl pectin/fructose dispersions, 173; ELISA determination of turkey roll endpoint: effects of formulation, storage and processing, 1258; gelation of turkey myofibrils: effects of, 727; heat inactivation of trypsin inhibitors in soymilk at ultra high, 859; influence on chemicla aging indicators for cheddar cheese, 1307; mapping in model food gel using magnetic resonance imaging, 168; microbial growth estimation in liquid media exposed to fluctuations, 644; modified atmosphere packaging protects market quality in broccoli under ambient storage, 1070; numerical and statistical methods to analyze spoilage of refrigerated solid foods exposed to abuse, 914; of drying affects quality of Chinese-style sausage inoculated with lactic acid bacteria, 249; of freezing affects sensory, shear, cooking and composition of ground beef, 34; oil effect on emulsion capacity of fresh or frozen meat and sheep tail fat, 492; protein-protein interactions in extrusion of soya at various, 378; solid food thermal conductivity determination at high, 908; thermal conductivities of starch gels at high influenced by moisture, 884

tenderness
bovine longissimus muscle affected by postmortem aging time, animal age and sex, 713; time-intensity methodology for beef perception, 943

texture
during processing of apples by combined methods, 1118; gluconic acid influences canned asparagus, 614; high- protein products of defatted soy flour, corn starch and beef: shelf-life, physical and sensory properties, 21; linear programming and RSM to optimize surimi gel, 535; of ham coated with emulsions of different fat levels, 482; of pasteurized beef from precooked roasts, 5; panelist preferences affect sensory evaluation of green beans, 138; partial drying of cut pears to improve freeze/thaw, 357; relationships between electromyography, sensory and instrumental measures of cheddar cheese, 1313

thermal conductivity
measurement using DSC, 1145; of starch: a model-independent determination, 413; reference materials for calibrating probes used for measuring frozen foods, 186

thermal desorption
loss of volatile lipid oxidation products during, 220

thermal inactivation
kinetics of wheat germ lipoxygenase, 1095

thermal stability
of metabolically conjugated precursors of flavor components in meat and milk, 292

thermoresistometer
kinetics of C sporogenes spore destruction using computer- controlled, 649

thickness
hydrophilic edible films: modified procedure for water vapor permeability and explanation of effects, 899

time-intensity method
for beef tenderness perception, 943; parameters of carbohydrate and high potency sweeteners, 1418

tocopherol
delays oxymyoglobin and phospholipid oxidation, 1273; extraction with application to quantitative analysis of lipophilic nutrients, 663

tocopheryl acetate
enhances beef quality in Holstein and beef breed steers, 28

torsion
protease inhibitor effects on measurements and autolysis of whiting surimi, 1050

tortilla chip
SEM evaluation of microstructure during deep-fat frying, 199

toxins
formed on prolonged heating of citrinin under water conditions, 229

Tradescantia pallida
anthocyanin identification from by LSI-MS and chemical analysis, 1068

transglutaminase
polymerization of beef actomyosin induced by, 473

Trichoderma viride
medium hydration effects on, 1346

triglyceride
content of supercritical CO_2 extracted fractions of beef fat, 1237

trout, rainbow (Oncorhynchus mykiss)
lipid hydrolysis and oxidation related to astaxanthin content in muscle of frozen, 513

trypsin
heat inactivation of inhibitors in soymilk at ultra high temperatures, 859; inhibitor activity and tannin content do not affect Ca bioavailability of legumes, 382; inhibitor does not affect Ca bioavailability of legumes, 382; purification of -like enzyme from crab, 780

turkey
effect of pH, salt and temperature on gelation of myofibrils, 727; ELISA determination of roll endpoint temperature: effects of formulation, storage and processing, 1258; end point temperature affects glucosaminidase activity in, 710; gelation of breast and thigh myofibrils: changes during isolation of myofibrils, 983; methods for determining nonheme iron in, 288; oxygen availability affects prooxidant catalyzed lipid oxidation of cooked, 278; prevention of lipid oxidation with hot packaging and antioxidant combinations, 283; sodium tripolyphosphate stability and effect in, 501

tyrosinase
hexylresorcinol, a potent inhibitor of mushroom, 609

U

ultrafiltration
component analysis of disaggregation of pectin during plate module, 680; egg white lysozyme purification by, 303

urea
heat and fermentation effects on milk, 548

V

vacuum
composition and gel-forming properties of evaporated liquid egg white, 1013; concentration of liquid egg white by evaporation, 1017; infiltration of polyamines increases firmness of strawberry slices under various storage conditions, 361; microbiology of fresh beef packaged under, 935

vanillin
interaction with milk protein isolates in sweetened drinks, 1142

vegetables
absorbability of Ca from broccoli, bok choy and kale, 1378; suitability of plastic films for modified atmosphere packaging of, 1365
See also individual species

viscoelasticity
of myofibrillar protein-polysaccharide composite gels, 164

viscosity
protein concentration, pH and ionic strength affect actomyosin, 1269

vitamins
B_6: in raw and fried chicken by HPLC, 505; in raw/fried chicken, (5)ii
C: assay for in food using peroxidase, 619
D: stability in milk, 552
E: enhances color and display life of beef from Holstein steers, 701
pantothenic acid and biotin retention in cooked legumes, 1084
tocopherol and ascorbate delay oxymyoglobin and phospholipid oxidation, 1273

volatiles
flavor component in crab cooker effluent and concentrate, 525; from raspberry and strawberry inhibit postharvest decay fungi, 793; in crab and processing by-product, 1203; in yogurt-type products from soymilk containing Bifidobacterium, 153; loss of lipid oxidation products during thermal desorption in GC, 220; nitrosamines in cured meat packaged in rubber nettings, 47; retention in microwave freeze-dried model foods, 1157; soybean flour lipoxygenase isozyme mutant effects on bread dough, 583; sulfur formed in disrupted tissues of cabbage, 835

vomitoxin
additives affect flour during breadbaking, 416

W

water
absorption in chickpea and field pea using Peleg model, 848; as plasticizers affect mechanical and vapor barrier properties of edible wheat gluten film, 206; bologna from massaged minced batter, 259; carbonated lexicon: temperature and CO_2 influence on descriptive ratings, 893; chlorine uptake by chicken frankfurters immersed in chlorinated, 987; droplet size and emulsifier type affect crystallization and melting of hydrocarbon emulsions, 1148; hydrophilic edible films: modified procedure for vapor permeability, 899; mineral loss in cowpeas by pressure heating in, 856; mobility in starch-based fat replacer by NMR, 1103; potato cube response to blanching and high hydrostatic pressure, 1371; vapor permeability of caseinate based edible films affected by pH, Ca crosslinking and lipid content, 904: vapor: polarity homogeneity and structure affect permeability of model edible films, 426

water activity
compressive stress-strain relationships of two puffed cereals in bulk, 1356; depression by soluble and insoluble solids in alginate restructured beef heart meat, 959; measurement above 100°C, 449

water vapor barrier
water and glycerol affect properties of edible wheat gluten film, 206

water holding
microcentrifuge based method for measuring protein gels, 1040

wheat
amino acids in fermenting sourdough, 1324; assessing chemical form of Ca in, 605; binding of zinc to bran, 365; erythroascorbic acid in yeast and effects on dough, 845; model for gelatinization of starch in twin-screw extruder, 872; optimizing assay and extraction of lipoxygenase in germ, 1090; pasting of flour extrudates containing conventional baking ingredients, 567; thermal inactivation kinetics of germ lipoxygenase, 1095; water and glycerol as plasticizers affect mechanical and water vapor barrier properties of edible gluten film, 206

whey
calcium induced gelation of pre-heated protein isolate, 867; digestibility of protein/casein complexes isolated from heated concentrated milk, 299; disulfide bond formation affects stability of protein isolate emulsions, 1036; droplet size and coalescence stability of protein stabilized milkfat peanut oil emulsions, 439; dynamic properties and microstructure of partially insolubilized protein concentrate gels, 1047; gel point of egg proteins using dynamic rheological data, 116; Pediococcus acidilactici bacteriocin production in permeate and inhibition of L. monocytogenes in foods, 430; prefiltration using formed-in-place metallic membranes reduces microbial content of, 544; properties of protein gels containing emulsified butterfat, 158

whipped cream
fixation staining for examining microstructure in by electron microscopy, 124

white tissue
sodium chloride treatment or waterjet slicing effects on development in carrot sticks, 1390

whitefish
freshness evaluation in during chill storage, 1212

whitener
descriptive sensory profiling for optimizing the formula of peanut milk-based liquid coffee, 120

whiting
denaturation of fillets, 1055; protease inhibitor effects on torsion measurements and autolysis of surimi, 1050

wine
lactobacillus from WA state: isolation and characterization, 453

Y

yeast
chemometrics assess quality of breadmaking starters, 419; erythroascorbic acid in and effects on wheat dough, 845; inhibition in grape juice containing SO_2, sorbic acid and dimethyldicarbonate, 1132

Yersinia enterocolitica
in pork packaged under modified gas atmospheres, 475

yogurt
bacterial growth and volatile compounds in -type products from soymilk containing Bifidobacterium, 153; chemical, microbiological and sensory properties of plain nonfat, 991; Mg selectively isolates gellan gum from, 539

Z

zinc
binding to apple fiber, wheat bran and fiber components, 365; fertilization increases ascorbic acid and mineral contents of potatoes, 1375; soluble and lipid bound during processing of infant milk formulas, 756

ERRATA NOTICE

J. Food Sci. 58(5): 950-952 + 958 (1993)—Fat and Cholesterol Content of Beef Patties as Affected by Supercritical CO_2 Extraction by J.W. King, J.H. Johnson, W.L. Orton, F.K. McKeith, P.L. O'Connor, J. Novakofski, and T.R. Carr. Page 951, Figure 2 is upside down and should be inverted. When the authors approved the galley the figure was positioned correctly, but somehow after the galley was transmitted to the printer the figure was transposed. Please correct accordingly. Our apology to the authors for this error. Reprints will carry the figure correctly positioned.

J. Food Sci. 58(4): 821–826 (1993)—Optimizing Processing Conditions for Chemical Peeling of Potatoes using Response Surface Methodology by R.L. Garrote, V.R. Coutaz, J.A. Luna, E.R. Silva, and R.A. Bertone. On page 823, Table 4, the first five column heading are correct as printed, but the last three should be changed to read in sequence: (Col. 6) – Unpeeled skin; (Col. 7) – Penetration of NaOH; and (Col. 8) – Heat ring. Please correct accordingly.

Copies of articles from this publication are now available from UMI Article Clearinghouse.

The UMI Article Clearinghouse offers articles from more than 11,000 copyright-cleared periodicals in a wide range of subjects. You can place your orders electronically, as well as by phone, mail, and telefacsimile. For more information, please write to: UMI Article Clearinghouse, 300 North Zeeb Road, Box 11, Ann Arbor, MI 48106 USA. Or call toll-free for immediate response: 800-521-0600. From Alaska and Michigan call collect 313-761-4700. From Canada, call toll-free 800-343-5299.

U·M·I
A Bell & Howell Company
300 North Zeeb Road
Ann Arbor, MI 48106 USA